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A U S T R A L I A

**Building social capital within the framework of agricultural cooperatives development  
in rural Nepal**

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## **Abstract**

This dissertation explores the building and utilization of social capital within agricultural cooperatives in rural Nepal, where livelihoods are under pressure amid challenges posed by rapidly changing socio-economic and environmental conditions. It seeks to answer the following research questions:

- RQ 1: What are the triggers and drivers of social capital building and how they are manifested within the framework of development of rural agricultural cooperatives?
- RQ 2: What are the various mechanisms of social capital building within the structure and function of cooperatives and what are the key enabling factors of the building of social capital?
- RQ 3: What are the major manifestations of change in social capital built with the development of agricultural cooperatives?
- RQ 4: What are the major utilizations and impacts on rural livelihoods of social capital built through the development of agricultural cooperatives?

Using a case study methodology, four agricultural cooperatives in the Western hills of Nepal were purposively selected according to criteria of size, scale and accessibility. Data collected from semi-structured interviews were triangulated with those from focus group discussions and non-participant observation. Data were coded and organized against the research questions, using *Nvivo* 10 software. Within-case analysis was carried out for the emerging themes and patterns based on the conceptual framework whose major elements include triggers, drivers, mechanisms, enabling factors, manifestations of change, utilization and impacts of social capital building. Within-case data were analysed for pertinent themes, and cross-case patterns were developed through comparing and contrasting within-case themes.

Major triggers of social capital building are development intervention support from external agencies, or local stimuli generated by a critical natural incident or local farmer leadership initiative, which stimulate concerted action for collective benefit which may lead to formation of an agricultural cooperative. Policy is the overriding driver of social capital building, with other drivers including poverty and livelihood needs, economic opportunity, collective bargaining and socio-cultural factors.

The main mechanism of social capital building in small agricultural cooperatives is the monthly meeting while in large cooperatives with suitable facilities it is the selling of vegetables through a collection centre. Local farmers' leadership and DADO, the local extension agency, are two main enabling factors supporting the building process.

Increased unity among members, as the manifestation of the change in group bonding social capital, is the core of the social capital building process although increased trust and mutual cooperation are other observed changes. The norms of reciprocity among members are generally higher in smaller cooperatives. Trust in fellow members and leadership are attributed to transparency in financial matters. Creation of new linkages with service-providing agencies is the main change observed in linking social capital, which is higher for the cooperatives having renowned or well-located production pockets, prior exposure of local farmers to external support agencies, and readily accessible cooperative headquarters. Generally, the growth in bridging social capital is insignificant. Bonding social capital is utilized more than the other two forms, meaning change in bonding social capital is the crux of the social capital building process in the cooperatives investigated. This form of social capital also influences other forms.

Accessing farm technologies and information and credit are two major utilizations of social capital for individual cooperative members. Likewise, better market access is the main benefit for semi-commercial and commercial farmers from bigger cooperatives belonging to well established production pockets. Similarly, exchange of labour is more prevalent among small cooperatives members who live in close proximity. At the collective level, the main utilization of social capital is for collective bargaining for government services and facilities, with limited use for collective bargaining in produce marketing by the members from bigger scale cooperatives.

The major impacts of social capital at member or household level are contribution to increased farm income and increased empowerment. Likewise, expanding and popularizing vegetable farming, and reinforcing of the trend of community participation in local resource management and community cohesiveness and harmony are major impacts at community level. Of the three forms, bonding social capital impacts the functioning and performance of the cooperatives the most by bringing an enhanced commitment of the cooperative leadership and general members towards cooperative affairs. Improved cooperative performance directly

and positively influences various livelihood impacts, which reinforce the commitment of members and executives.

Building of social capital in rural farming communities can help improve sustainable rural livelihoods under pressure amid challenges posed by rapidly changing socio-economic and environmental conditions. Relevant extension and cooperative development policies, and implementation of local leadership development programs, are identified as foci for government efforts designed to foster and support social capital building in such communities. This research can contribute to dialogue about the potential role and importance of social capital in Nepalese society, particularly in rural communities. Social capital as a concept has as yet received virtually no recognition in academic or policy spheres of the country. Making its existence and importance explicit will aid development of effective government policies aimed at addressing rural community issues.

### **Declaration by author**

This thesis is composed of my original work, and contains no material previously published or written by another person except where due reference has been made in the text. I have clearly stated the contribution by others to jointly-authored works that I have included in my thesis.

I have clearly stated the contribution of others to my thesis as a whole, including statistical assistance, survey design, data analysis, significant technical procedures, professional editorial advice, and any other original research work used or reported in my thesis. The content of my thesis is the result of work I have carried out since the commencement of my research higher degree candidature and does not include a substantial part of work that has been submitted to qualify for the award of any other degree or diploma in any university or other tertiary institution. I have clearly stated which parts of my thesis, if any, have been submitted to qualify for another award.

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## **Publications during candidature**

### **Peer reviewed papers**

Shrestha, RK, Cameron, D, Coutts, J & Cavaye, J 2015, 'Building and Maintenance of Social Capital in Rural Farming Community of the Western Hills of Nepal' *International Journal of Asian Business and Information Management*, 6(3), 26-38.

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None.

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agricultural cooperative, rural livelihood, policy, extension, hills, leadership, dado, meeting, unity, farming communities

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## **Table of Contents**

Abstract .....	ii
Declaration by author.....	v
Publications during candidature.....	vi
Acknowledgements.....	viii
Table of Contents.....	xi
List of Figures .....	xvii
List of Tables .....	xviii
List of Abbreviations .....	xix
CHAPTER 1 INTRODUCTION.....	1
1.1 Introduction .....	1
1.2 Background and Context.....	1
1.2.1 Poverty, Rural Livelihood and Agriculture .....	1
1.2.2 Ongoing Changes in Rural Nepal .....	2
1.2.3 Social Capital and Rural Livelihood .....	4
1.2.4 Development of Agricultural Cooperatives for Improving Rural Agricultural Production and Marketing System .....	5
1.3 Research Problem Statement and Research Questions .....	6
1.4 Rationale and Significance of the Research .....	7
1.5 Methodology .....	8
1.6 Definitions .....	9
1.7 Delimitation of Scope and Key Assumptions of the Study.....	10
1.8 Dissertation Organization.....	11
1.9 Chapter Summary and Conclusion.....	11
CHAPTER 2 REVIEW OF LITERATURE.....	12
2.1 Social Capital .....	12

2.1.1 Meaning and Definition of Social Capital .....	12
2.1.3 Measurement of Social Capital.....	16
2.1.4 Importance and Benefits of Social Capital .....	17
2.2 Building or Creating of Social Capital .....	22
2.2.1 Government Interventions .....	22
2.2.2 Community-based External Intervention.....	23
2.2.3 Group Based Activities.....	24
2.2.4 Networks of Business and Common Ancestor .....	25
2.2.5 Cultural Capital.....	25
2.3 Cooperatives.....	26
2.3.1 Definition and Types of Cooperatives .....	26
2.3.2 Importance of Cooperatives for Agricultural and Rural Development .....	27
2.3.3 Development of Cooperatives in Nepal.....	28
2.4 Cooperative and Social Capital .....	31
2.4.1 Influence of Social Capital in Cooperative Formation and Functioning.....	31
2.4.2 Role of Cooperatives in Building of Social Capital .....	32
2.5 Summary of the Literature Review and Synthesis, Identification of Gaps and Developing Research Questions .....	33
2.5.1 Summary and Synthesis of the Review .....	33
2.5.2 Gap in the Literature.....	34
2.5.3 Research Questions.....	35
2.6 Conceptual Framework .....	36
2.6.1 Process and Mechanism of Social Capital Building.....	37
2.6.2 Utilizations and impacts of social capital .....	39
2.7 Chapter Summary and Conclusion.....	42
<b>CHAPTER 3 RESEARCH METHODOLOGY .....</b>	<b>43</b>
3.1 Introduction .....	43
3.2 Research Paradigm, Approach and Methodology .....	43
3.2.1 Constructivist Paradigm .....	43
3.2.2 Qualitative Research Approach .....	45
3.2.3 Case Study Methodology.....	46
3.3. Selection of Research Area and the Cases .....	46

3.3.1 Selection of Research Areas .....	47
3.3.2 Selection of Cases.....	48
3.4 Data Collection and Analysis .....	51
3.4.1 Data Collection .....	51
3.4.2 Data Management and Analysis .....	56
3.5 Ethical Considerations.....	58
3.6 Trustworthiness of the Study .....	59
3.7 Chapter Summary and Conclusion.....	61
CHAPTER 4 CASE STUDIES .....	62
4.1 Introduction .....	62
4.2 Mirmire Multipurpose Cooperative Ltd., Baglung, Baglung.....	65
4.2.1 General Description.....	65
4.2.2 Process and Mechanism of Building of Social Capital .....	69
4.2.3 Utilization and Impact of Social Capital .....	80
4.3 Jana Kalyan Agricultural Cooperative Ltd, Pitlek, Syanja .....	90
4.3.1 General Description.....	90
4.3.2 Process and Mechanisms of Social Capital Building .....	94
4.3.3 Utilization and Impact of Social Capital .....	103
4.4 Triyasi Agricultural Produce and Market Management Cooperative Ltd., Triyasi, Syanja.....	112
4.4.1 General Description.....	112
4.4.2 Process and Mechanisms of Social Capital Building .....	115
4.4.3 Utilization and Impact of Social Capital .....	125
4.5 Khapaudi Agriculture Cooperative Ltd., Khapaudi, Kaski .....	136
4.5.1 General Description.....	136
4.5.2 Process and Mechanisms of Social Capital Building .....	140
4.5.3 Utilization and Impact of Social Capital .....	151
CHAPTER 5 CROSS-CASE ANALYSIS.....	162
5.1 Process and Mechanisms of Social Capital Building.....	163
5.1.1 Triggers and Drivers of Social Capital Building in Rural Farming Communities	163
5.1.2 Summary and Conclusion.....	171

5.2 Mechanisms of Social Capital Building within the Framework of Cooperatives.....	172
5.2.1 Classification of Mechanisms.....	172
5.2.2 Major Mechanisms of Social Capital Building and Their Functioning within the Cooperative .....	173
5.2.3 Informal Mechanisms beyond the Cooperative.....	179
5.2.4 Summary and Conclusion.....	180
5.3 Enabling factors of social capital building .....	180
5.3.1 Leadership .....	181
5.3.2 External Support.....	181
5.3.3 Socio-economic Factors .....	182
5.3.4 Physical Factors .....	183
5.3.5 Summary and Conclusion.....	184
5.4 Manifestation of Change in Social Capital .....	184
5.4.1 Bonding Social Capital.....	185
5.4.2 Bridging Social Capital .....	189
5.4.3 Linking Social Capital .....	190
5.4.4 Summary and Conclusion.....	193
5.5 Utilization and Impact of Social Capital .....	193
5.5.1 Utilization at the Individual Member Level .....	194
5.5.2 Utilization at the Collective Level.....	197
5.5.3 Impact at Individual or Household Level .....	200
5.5.4 Impact at Community Level .....	202
5.5.5 Impact of Social Capital in Cooperative Functioning and Performance .....	204
5.5.6 Maintaining Bonding Social Capital .....	209
5.5.7 Summary and Conclusion.....	211
5.6 Chapter Summary and Conclusion.....	211
CHAPTER 6   DISCUSSION OF FINDINGS .....	214
6. 1 Introduction .....	214
6.2 Research Question 1 .....	214
6.2.1 Triggers of Social Capital Building.....	214
6.2.2 Major Drivers of Social Capital Building.....	215
6.2.3 Summary and Conclusion: Drivers and Triggers of Social Capital Building .....	220

6.3 Research Question 2:.....	221
6.3.1 Classification of Mechanisms.....	221
6.3.2 Major Mechanisms of Social Capital Building within the Cooperatives .....	222
6.3.3 Informal Mechanisms beyond the Cooperatives .....	224
6.3.4 Functioning of Various Mechanisms of Building of Social Capital .....	225
6.3.5 Enabling Factors .....	226
6.3.6 Summary and Conclusion.....	229
6.4 Research Question 3.....	230
6.4.1 Changes in Bonding Social Capital .....	230
6.4.2 Change in Bridging Social Capital .....	233
6.4.3 Change in Linking Social Capital.....	233
6.4.4 Summary and Conclusion.....	235
6.5 Research Question 4.....	236
6.5.1 Utilization of Social Capital .....	236
6.5.2 Impact of Social Capital .....	241
6.5.3 Summary and Conclusion.....	248
6.6 Revisiting the Conceptual Framework and Developing Model of Social Capital Building, and Utilization and Impact.....	248
6.6.1 Revisiting the Conceptual Framework .....	249
6.6.2 A Model of Building of Social Capital within the Framework of Cooperative Development, and its Utilization and Impact in Rural Livelihood .....	251
6.6.3 Summary and Conclusion.....	254
6.7 Chapter Summary and Conclusion.....	255
CHAPTER 7   CONCLUSIONS AND IMPLICATIONS .....	257
7.1 Introduction .....	257
7.2 Answers to the Research Questions and Conclusions about the Research Problem....	257
7.2.1 Answers to the Research Questions.....	258
7.2.2 Conclusions about the Research Problem .....	259
7.3 Contribution to Knowledge.....	260
7.3.1 Contribution to Social Capital Literature .....	261
7.3.2 Contribution to Methodological Aspects of Researching Social Capital .....	261
7.3.3 Contribution to Knowledge. ....	262
7.4 Implications for Theory.....	263

7.5 Implications for policy .....	263
7.6 Implications for Practice .....	266
7.6.1 Government and Non-government Support Agencies.....	266
7.6.2 Primary Cooperatives and Representative Bodies.....	267
7.7 Limitations of the Study .....	267
7.8 Further Research .....	269
7.9 Concluding Remarks .....	269
List of References .....	270
Appendices .....	285
Appendix 1: Checklist of questions for the interview .....	285
Appendix 2: Checklist of Questions for Focus Group .....	290
Appendix 3: Research Project Information Sheet .....	292
Appendix 4: Informed Consent Form .....	294
Appendix 5: Distribution of Research Participants across the Cases.....	295



## **List of Figures**

Figure 2.1: Actors' Livelihood Strategies and Five Vital Capitals.....	19
Figure 2.2: Conceptual Framework: Building of Social Capital within the Framework of Agricultural Cooperatives Development, Utilization and Impact of the Social Capital in Rural Livelihood.....	41
Figure 3.1: Map Showing the Study Area and Case Study Sites.....	48
Figure 5.1: Word Cloud of Words Representing Motivation across the Cases for Joining the Cooperative.....	168
Figure 5.2: Word Cloud of Mechanisms of Social Capital Building in Case Study Cooperatives.....	174
Figure 6.1: Revised Conceptual Framework of Building of Social within the Framework of Development of Agricultural Cooperatives, and its Utilization and Impact in Rural Livelihood.....	248
Figure 6.2: A Model of Social Capital Building, Utilization and Impact in Rural Farming Communities within the framework of Development of Agricultural Cooperative.....	251

## **List of Tables**

Table 1.1:	Definition of Major Terms Used in the Dissertation.....	9
Table 3.1:	Bases of Selection of the Cases.....	49
Table 3.2:	Criteria Used for the Selection of Agricultural Cooperatives.....	50
Table 3.3:	Basic Information on Case Study Cooperatives.....	50
Table 3.4:	Framework for Data Collection.....	51
Table 3.5:	Strategies Adopted in Case Study Data Analysis.....	57
Table 5.1	Types of Trigger of Social Capital Building Evident across the Cases.....	162
Table 5.2:	Summary of Drivers of Social Capital Building across the Cases.....	164
Table 5.3:	Classification of Mechanisms of Social Capital Building across the Cases.....	172
Table 5.4:	Main Mechanisms of Social Capital Building in Case Study Cooperatives.....	173
Table 5.5:	Change or Development in Social Capital Related Parameters across the Cases.....	183

## **List of Abbreviations**

ACU	Agriculture Cooperative Union
ADB/N	Agriculture Development Bank/Nepal
ASC	Agriculture Service Centre
CBS	Central Bureau of Statistics
DADO	District Agriculture Development Office
DCU	District Cooperative Union
DDC	District Development Committee
DEOC	Department of Cooperatives
FAO	Food and Agriculture Organization
FFS	Farmers' Field School
GA	General Assembly
GON	Government of Nepal
ICA	International Cooperative Alliance
IPM	Integrated Pest Management
JT	Junior Technician
MOAD	Ministry of Agriculture Development
Nepal-SIMI	Nepal-Smallholder Irrigation Marketing Initiatives
NPC	National Planning Commission
RAD	Regional Agriculture Directorate
UNDP	United Nations Development Program
VDC	Village Development Committee

# **CHAPTER 1      INTRODUCTION**

## **1.1 Introduction**

This study is set in Nepal. It seeks to make an original contribution to knowledge by exploring phenomena previously unreported in this national context. It explores both the process and mechanisms involved in social capital building within the framework of agricultural cooperative development, and also the contribution made by social capital in rural livelihood improvement. Social capital, commonly known as networks of social relationships and the norms that govern such relationships, is argued to facilitate the ability of members of social organisations to act for mutual benefit (Putnam 1993). Fostering social capital is argued to improve livelihoods of rural populations by enhancing their access to other livelihood assets (DFID 1999). Development of agricultural cooperative in rural farming communities facilitates the building of social capital as a cooperative is a network organization, which runs by virtue of cooperation, trust and collaboration of local farmers (Valentinov 2003, 2004; Hong & Sporleder 2007). However, there is little evidence on how this form of social capital is built within the framework of development of rural agricultural cooperative, and how it impacts on rural livelihood, in general, and rural agricultural production and marketing systems, in particular. Employing qualitative multi-case study methodology this study explored the phenomenon in four agriculture cooperatives in the hills of Nepal.

This introductory chapter begins with the background and context that sets the foundation for the study. Following this is statement of research problems and research questions. Assumptions, and rationale and significance of the study will also be covered. The chapter will conclude by presenting the structure of the dissertation.

## **1.2 Background and Context**

### **1.2.1 Poverty, Rural Livelihood and Agriculture**

Nepal is one of the world's poorest countries. Latest figures show that 24 % of the total population lives below the poverty line (CBS 2011). Low productivity and slow growth of output in the agriculture sector is one of the major causes of poverty (ADB 2002; MoAD

2014). With approximately two-thirds of the labour force engaged in agriculture for their livelihood, high and sustained growth in the agriculture sector is critical for poverty reduction and overall economic development of Nepal (Upadhyaya 2000; FAO 2010 ; NPC 2011; MoF 2014). Moreover, since more than 80% people live in rural areas with agriculture the only major source of livelihood, poverty in Nepal is essentially a rural and agricultural phenomenon.

The agriculture sector in Nepal remains overwhelmingly subsistence-oriented, highly diversified at the farm level as opposed to specialised and commercialised, and grossly underserved by modern productive inputs and technology (NPC 2011). The majority of farmers in Nepal are smallholders with an average holding size of 0.68 ha. Almost half of total holdings are less than 0.5 ha in area (CBS 2013a). Small holding size of and growing land fragmentation have rendered investment in agriculture unprofitable, owing mainly to lack of economies of scale. Smallholder farmers have inadequate access to government extension services and also to modern agricultural inputs and institutional credit services (FAO 2010). If they do generate a market surplus their profitability is reduced by the lack of economies of scale and high transaction costs.

Other factors impacting the agricultural sector in Nepal include climate change impacts, declining soil fertility status, lack of infrastructure, and poor state of agriculture technology development and dissemination (MoAD 2014). These structural and institutional constraints to production and productivity and agricultural commercialization and diversification, combined with farmers' innate vulnerability to market related externalities, have been threatening food security and livelihood sustainability of smallholder farmers in Nepal.

### **1.2.2 Ongoing Changes in Rural Nepal**

The changes noted above impacting agriculture in Nepal are part of the rapid socio-economic, cultural and demographic transformation taking place in recent decades associated with factors including high population growth, natural resource degradation, climate change, internal conflict, globalization and market liberalization. These changes have impacted on every aspect of rural livelihoods.

Two associated major phenomena occurring in rural Nepal in recent years are land abandonment and feminization of agriculture (CBS 2013a). The main drivers of both

phenomena are massive outmigration of rural youth in search of employment, predominantly abroad, and lack of competitiveness of the agriculture sector (Khanal & Watanabe 2006; MoF 2014).

Nepal is one of the world's top remittance earning countries with more than three hundred thousand of its rural youth, mostly male, seeking overseas employment annually. In recent years remittances have shown 30% annual growth, and have become the second largest sector of the economy, after agriculture and forestry, contributing about 25 % share of GDP (MoF 2014). Although remittance earning has had positive impacts on poverty reduction and national income it has negatively impacted the agriculture sector (Tuladhar et al. 2014). It has also become one of the main causes of current social issues including family disintegration, crime, extra marital affairs, (Rijal 2013) and ill-fate of rural elderly people (Gautam 2008). With males in overseas employment, many rural households consist only of elderly people, women and children. This has resulted in feminization of rural agriculture as the number of female headed households has increased remarkably in recent years (Tamang et al. 2014). Females are taking charge of farming activities in addition to managing household chores and taking care of children and elderly relatives. There was a substantial increase in the proportion of females owning land, from 8 % to 19.7 %, in the ten years between 2001 and 2011(CBS 2013a).

Similarly, the increasingly prominent negative impacts of climate change in Nepal are considered major challenges for overall development (Bhandari 2013). The recent phenomenon of increased climate variability has adversely impacted agricultural production systems. Major adverse manifestations include: loss of cultivable land and top soil triggered by floods and landslides; loss of agro-biodiversity; increased incidence of harmful pest and diseases; early flowering and fruiting; and increased incidence of both drought and flooding (MoAD 2014). All these have been increasingly negatively impacting livelihoods and food security in Nepal, with greater effects on the poorest sections of the population, including small farmers, who are, in general, more vulnerable to external shocks because of inherently low capacity to adapt to changes. Many people have been forced to migrate in search of better livelihood options (CBS 2011). Overall agricultural production and productivity have consequently been affected, resulting in increased food insecurity and threats to the sustainability of agricultural production systems, and with increased potential danger of food crises and associated socio-economic upheaval. If these ongoing changes in the hills of Nepal

are not reversed or at least slowed the overall rural livelihood system will suffer significant and possibly permanent detriment.

While there could be several ways to address this issue, fostering social capital in such communities may be a powerful way to improve resilience of the people and improve their livelihoods. Building social capital is argued to help rural households cope with such changing socio-economic and agrarian conditions, as such households can draw on this form of capital to access other capitals to sustain their livelihood (DFID 1999)

### **1.2.3 Social Capital and Rural Livelihood**

The rural Livelihood Framework entails access to and utilization of five capital assets: natural, human, physical, financial and social (De Haan 2000). Good balance between endowment and utilization of these capitals is considered essential for the sustainability of rural livelihoods. Social capital as one of the forms of capital asset is defined as the ‘features of social life- networks, norms and trust- that enable participants to act together more effectively to pursue shared objectives’ (Putnam 1995b, pp 664-665).

Social capital is of particular importance especially for poor and marginalized people as it is one assured form of capital on which they can draw to mobilize other forms of capital to manage a decent livelihood (Mubangizi 2003). With low endowments of physical assets and resources, and a relatively poor state of human resource development, poor and marginal people rely heavily on their stock of social capital in their bid to earn a living (De Haan 2000).

Moreover, social capital has been much appreciated in the literature to have positive impacts on the progress of any society. It facilitates collective action of members in a social relationship, thereby benefiting the individuals and community at large (Putnam 1993). Social capital can also help enhance the prospects for agricultural development and more generally help alleviate poverty for individuals and for countries as a whole (Grootaert & van Bastelaer 2001). Social capital residing in a farming community has been argued to facilitate collective actions by the community and to be critical for sustainable development. Therefore, by drawing upon the social capital embedded in the farming community smallholder farmers can expand their livelihood opportunities and improve their overall socio-economic condition.

#### **1.2.4 Development of Agricultural Cooperatives for Improving Rural Agricultural Production and Marketing System**

Cooperatives in Nepal can provide an effective institutional framework to promote and sustain development at the local level (Upadhyaya 2000). Upadhyaya further argues that a careful review of development problems and prospects would probably suggest cooperatives as the only institutional mechanism for poverty reduction presently available to Nepal. Similarly, Bharadwaj (2012) reviewed the role of cooperatives in poverty reduction in Nepal and concluded that they possess the capacity to break the vicious cycle of rural poverty through contributing to economic and social improvements.

Current development policies and plans of Nepal have considered the cooperatives sector as one of the ‘three pillars’ of the country’s economic development; the other two pillars being the public sector and the private sector (NPC 2011). Such policies and plans have adopted a strategy of encouraging small and marginal farmers to produce low volume, high value crops and commodities by organizing them into farmer groups and co-operatives (NPC 2011). A number of government institutions as well as representative cooperatives bodies are working for the development of the cooperatives sector in the country. Accordingly, there has been remarkable growth in the number of cooperatives including agriculture cooperatives in Nepal (MoCPA 2015).

Agricultural cooperatives offer market opportunities to smallholders, and provide them with services such as better training in natural resource management and better access to information, technologies, innovations and extension services, thus helping smallholders achieve sustainable livelihoods and improve food security in their communities (IFAD 2012). As in other developing countries, agricultural cooperatives in Nepal are involved in overall socio-economic wellbeing of farming community, in general, and members, in particular. Major roles that agricultural cooperative can play in Nepal include: promoting commercialization of agriculture through providing farm inputs, credit and improved technologies to members; small-scale processing and value adding of primary agriculture products; marketing of primary as well as processed agriculture products in domestic as well as international markets; capacity building of member farmers in technical as well as management aspects of agricultural production and marketing; promotion of sustainable use of local resources; community development; policy lobbying for farmer-friendly agriculture; networking with government and non-government service providers to tap resources for the



benefit of farming communities; and promotion of social inclusion and social harmony in the community.

### **1.3 Research Problem Statement and Research Questions**

Social capital is important in the rural communities of Nepal for two reasons.

- (i) It can help to collectively solve various problems and issues confronting communities due to ongoing agrarian, demographic, socio-economic and environmental changes that have further marginalized the resource-poor rural population in general, and small farmers in particular and made their livelihood more difficult. Coping with these changes can be crucial for the sustainability of the rural agricultural system and associated livelihoods.
- (ii) It can also enhance the access of rural farmers to other forms of capital required to sustain production levels and maintain livelihoods.

The government of Nepal has been promoting development of agricultural cooperatives in rural areas as an important strategy of rural agricultural development and poverty reduction. As a result of such efforts there has been remarkable growth in the number of rural cooperatives established in recent years. However, such growth has not been accompanied by a concomitant improvement in rural livelihoods. Adhikari and Risal (2007) found that while existing policies reward the formation of groups they ignore sustainability aspects of community based organizations in Nepal. While many other factors could be associated with the modest performance of such cooperatives, poor development of social capital could be one of the important factors as a cooperative is a highly social capital dependent organization which runs on the basis of mutual trust and cooperation (Valentinov 2004).

On the other hand, scholars have argued that functional cooperatives build social capital as a necessity for smooth running and successful performance (Valentinov 2004; Melece 2013). The structure and function of cooperatives provide a framework for social capital building in farming communities, facilitating collective action leading to better livelihood outcomes for the farmers, their families, and their communities at large (Hong & Sporleder 2007; Markelova & Mwangi 2010). Hence, building of social capital through cooperatives can arguably play a vital role in enhancing the overall sustainability of rural agricultural systems and rural livelihoods. However, little is known about this phenomenon in the context of rural

Nepal, and there is a clear need for research into fostering and supporting social capital building and utilization in farming communities.

Hence, the research issues addressed in this dissertation relate to improving understanding about what process and mechanisms are involved in building of social capital within the framework of agricultural cooperative development and how the social capital built through cooperatives has contributed to rural livelihoods, in the context of rural Nepal.

This puzzle is expressed in the following research problem statement:

**How is social capital built through the development of agricultural cooperatives and how does it impact on rural livelihoods?**

The following research question will be pursued to address the research problem:

- RQ 1: What are the triggers and drivers of social capital building and how they are manifested within the framework of development of rural agricultural cooperatives?
- RQ 2: What are the various mechanisms of social capital building within the structure and function of cooperatives and what are the key enabling factors of the building of social capital?
- RQ 3: What are the major manifestations of change in social capital built with the development of agricultural cooperatives?
- RQ 4: What are the major utilizations and impacts on rural livelihoods of social capital built through the development of agricultural cooperatives?

## **1.4 Rationale and Significance of the Research**

Scholars argue that social capital is essential to cooperative functioning and performance and that cooperatives help in building of social capital. However, despite these concepts being closely related, the literature on the relationship between them is scanty. This study will contribute to the literature by showing how both the concepts of social capital building and cooperative development reinforce each other. Despite the importance of social capital in improving cooperative performance as well as overall rural livelihoods, extensive review of the literature did not reveal any studies conducted in the context of Nepal. This dissertation will help fill this gap by providing context based evidence on the role of social capital in cooperative performance and ultimately on rural livelihoods.

Although cooperative sector development has been an important agenda item of the government of Nepal for agricultural and rural development, the term ‘social capital’ does not appear in any policy document or implementation plan. The findings of this study will help policy makers better understand the role of social capital in cooperative development, as well as in overall rural development, and provide suggestions for its promotion, utilization, maintenance and support. This should ultimately lead to formulation of more effective policies and programs aimed at improving agricultural systems and rural livelihoods.

The research findings will contribute to the body of social capital literature on the process and mechanisms of social capital building in agricultural cooperatives and its potential utilization by rural farmers in a developing world context in general, and in Nepal in particular. Specifically, the study will identify: various triggers and drivers of social capital building; various mechanisms of social capital building available within the agriculture cooperatives; manifestation of change in social capital and its utilization; and impacts of social capital in rural livelihood.

The research will also provide a framework for studying social capital building in agricultural cooperatives. Furthermore, it will also add to the methodological literature of social capital research through development of a novel approach for conduct of social research on social capital building in agricultural cooperatives.

From the perspective of practical implications, the research will inform policy about possible interventions for facilitating social capital building in farming communities in general, especially within the framework of agriculture cooperatives, in developing countries. It will also provide feedback to societies and institutions involved in promotion and management of agriculture cooperatives about important factors to be considered to bolster social capital building.

## **1.5 Methodology**

Detailed discussion on research methodology is given in Chapter 3. This study employed qualitative case study methodology to understand the phenomenon of social capital building in agricultural cooperatives, and utilization and impact of social capital. Four cooperatives were investigated based on the conceptual framework developed for the study. Data were generated mainly through interviews with cooperative members and executives. Various data

triangulation techniques were also used. Data was organized using *Nvivo 10* software (QSR 2012) before analysis for themes and constructs. Cross-case patterns were generated through comparing and contrasting within-case themes. Finally, a model based on the findings and discussion was developed.

## 1.6 Definitions

Definitions adopted by researchers are often not uniform, so key and controversial terms are defined to establish positions taken in the PhD research (Perry 1998, p. 71). Table 1.1 gives definition of major terms used in this thesis. Definitions are given in the context of case study.

**Table 1.1: Definition of Major Terms Used in the Dissertation**

<b>Terms</b>	<b>Definition</b>
Agricultural cooperative	Community based cooperatives operating rural areas and registered under the Cooperative Act, 1992 with majority of members from farming background. The term is used to denote all the cooperatives by the name agricultural cooperative and other cooperatives from allied enterprises such as vegetables cooperatives, and multipurpose cooperative with agriculture or vegetables mentioned in the objective of the cooperative.
Bonding social capital	The interpersonal relationship or network of cooperative members based on norms of reciprocity and trust among them, and between them and the cooperative management
DADO (District Agriculture Development office)	A district level unit of the Department of Agriculture, Nepal which basically implements various extension educational activities for the local farmers. It also administers material supports including community based small scale project funding as per government policy, programs and rules.
Drivers of social capital building	Represent the reasons that motivate the farmers at individual as well as collective level to form and join the agricultural cooperatives.
Group bonding social	Represents the bonding social capital at the group or collective

capital	level and is mainly manifested in terms of perceived unity among the members and executives within the cooperative
individual bridging social capital	The network or relationship of members with non-member villagers, and other people beyond the village
Individual linking social capital	Network of individual member to the service providing government and non-government agencies developed by virtue of membership
institutional bridging social capital	Network or relationship of the cooperative with other cooperatives, representative higher level cooperative bodies such as cooperative unions or representative farmers' organization represent institutional bridging social capital
Institutional linking social capital	Networks established by the cooperative with service providing government and non-government agencies
Mechanism of social capital building	Various forums present within the cooperative, and other likely events and occasions which provide which facilitate face-to-face interaction between different actors with potential building and reinforcing of social capital
Social capital	The social networks with the norms of reciprocity and trust which facilitate certain productive action of actors associated with such networks (Putnam 2000)
Triggers of social capital building	Factors or incidents that cause initiation of the process of social capital building in rural farming communities by prompting the local farmers in one place to strive for collective action of mutual benefit.

### **1.7 Delimitation of Scope and Key Assumptions of the Study**

The study had four major delimitations. Firstly, this study is based on the agrarian and socio-economic context of the Hills region of Nepal. Therefore, the research problem and findings are delimited within this context, and not necessarily directly applicable elsewhere. The phenomenon occurring beyond this context might be different. Secondly, this study considered the process and mechanisms of social capital building within the framework of agricultural cooperative development. It did not explore other possibilities for social capital building in farming communities. Thirdly, this study did not explore the existing stock of

social capital in the rural farming community beyond the framework of the cooperative. Finally, this study did not explore the perspective of other stakeholders beyond the cooperative and therefore did not compare and reconcile the perspectives of all stakeholders associated with cooperative affairs.

## **1.8 Dissertation Organization**

This dissertation consists of seven chapters. After this introductory chapter, Chapter 2 will review the relevant literature on social capital and cooperatives. It also presents a conceptual framework of the mechanism of social capital building within agriculture cooperatives and its utilization and impacts within the rural livelihood context. Chapter 3 presents the details of methodology used in this the study. Chapter 4 provides description of individual cases and within case analysis. Chapter 5 provides synthesis of the case studies in cross-case analysis which compares and contrasts the four case studies. Finally, Chapter 6 discusses the findings against the research questions and conceptual framework and suggests a model of social capital building within the framework of agricultural cooperative development and its contributions in improving rural livelihood. The final chapter presents conclusions of the study with implication of the findings for the theory and practice.

## **1.9 Chapter Summary and Conclusion**

This chapter has provided an overview of the research and has outlined the dissertation structure. It has set the foundation for the study by providing a synopsis of the research context and research problem together with the rationale and significance of the research. The chapter also highlighted methodology adopted in this research and delimitations of the scope of the study. The next chapter will review the pertinent literature, identify gaps and present the conceptual framework of the study.

## **CHAPTER 2      REVIEW OF LITERATURE**

The purpose of this chapter is to position the research by reviewing the literature on the two main concepts pertinent to the study: social capital and cooperatives. The review of social capital literature will provide the conceptual underpinnings together with the benefits or importance of social capital in the context of rural livelihoods. Likewise, the review of cooperatives literature will highlight the renewed importance of cooperatives following the resurgence of interest in this sector as a rural development strategy. The review then explores the linkages between social capital and agricultural cooperatives. The chapter concludes with a conceptual framework guiding this study into the building of social capital in agricultural cooperatives, and its utilization and impact on various aspects of rural livelihoods.

### **2.1 Social Capital**

This section provides the review of literature on the concept and importance of social capital. The review will address the wide array of definitions and reported forms of social capital, issues with its measurement, and various benefits that social capital has produced.

#### **2.1.1 Meaning and Definition of Social Capital**

In the contemporary world one can find remarkable variations in the pace of economic growth and development across countries, regions and societies that are otherwise at par in their natural, physical and human capital endowments. In the past, economists would use economic variables alone to explain such variations in economic outcomes. However, over time, economic theories came under criticism for not being fully able to explain the differential economic growth and development outcomes. Such theories ignored socio-cultural variables and other possible factors contributing to economic performances while empirical evidence has shown the critical role of socio-cultural factors in economic development (Bhandari & Kumi 2009). As Dhesi (2000) has pointed out, merely differences in material inputs cannot explain differences in outcomes of development initiatives and that development initiatives should take into account the role of social capital, that is, shared knowledge, understanding, values, norms, traits, and social networks to ensure the intended results. Social factors are key determinants of economic progress (Inglehart & Baker 2000). Social capital directly enhances the productivity factor and, hence, it can be treated as capital (Dasgupta 2000). Social capital, expressed in terms of networks, norms, trust, shared beliefs

and values, shapes development outcomes more than any other (technical or economic) factor (Dhesi 2000). Granovetter (1985) contends that most economic behaviours are embedded in social networks. Hence, the level of social capital could be one of the critical factors to explain different outcomes in an organization or of development initiatives. Thus, failure of economic development in addressing equity issues and social problems led to a reorientation of development approaches with more emphasis on norms, values, beliefs and institutions; this in turn led to the emergence of the concept of social capital.

The core idea of social capital is ‘relationship matters’ or ‘social networks have value’ (Field 2008). The term ‘social capital’ is believed to have been first used by Hanifan in 1916 to highlight the role of community in improving school performance in the neighbourhood (OECD 2007; Conrad 2008). Widespread use of the term ‘social capital’ in the literature began in the 1980s through the two prominent scholars Pierre Bourdieu and James Coleman. However, Robert Putnam is considered to be the one to popularize the concept through his seminal work *Making Democracy Work: Civic Traditions in Modern Italy* (Putnam 1993). Use of ‘social capital’ in literature has since been increasingly common but with little consistency in definition, use, application and analytical validity of the concept (Hopkins 2002). However, most definitions have at least two things in common: they are about some sort of social network; and use of such networks for the individual and/or collective benefits. The contributions of several leaders in the field are outlined below.

Bourdieu (1986) leans towards Marxism in conceptualizing social capital as a means to reinforce class and unequal power relationships in society. He proposes three forms of capital: economic, cultural and social. He contends that one form of capital is convertible, on certain conditions, to another. Bourdieu (1986, p. 249) defines social capital as ‘...the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition--or in other words, to membership in a group--which provides each of its members with the backing of the collectively-owned capital’. He seems to believe that in social relationships there is a power struggle between individuals who always seek to maximize their own access to these resources at the expense of others. In other words, a person wants to fulfil his own purposes by virtue of being a member in any social relationship.



Coleman (1988), on the other hand, defines social capital by its function. 'It is not a single entity but a variety of different entities, with two elements in common: they all consist of some aspect of social structures, and they facilitate certain actions of actors whether persons or corporate actors within the structure'(Coleman 1988, p. S98). Coleman contends that individuals' behaviours are influenced by characteristics of the social system they belong to but are motivated by their personal interests and they rationally decide their actions. In pursuing rationally set personal goals, individuals establish long lasting relationships which serve as resources and thereby constitute social capital. Under this view, social capital can take three forms: obligations and expectations which depend on trustworthiness of the social environment; potential for information embedded in social relations that provide basis for action; and group norms with effective sanctions. Coleman maintains that social capital is neither a private nor a public good; it is rather collective good that is generated spontaneously and increases with its usage.

Putnam (1993) extends this functional viewpoint by also considering efficiency. He defines social capital 'as the features of social organization, such as trust, norms and networks, that can improve efficiency of society by facilitating coordinated actions' (Putnam 1993, p. 167). He argues that social networks facilitate social interactions that lead to enhanced productivity of an individual and group. He has some accord with Coleman in that he sees social capital as a public good which cannot be transformed into a private good because of its collective nature. He also likewise asserts that stocks of social capital in terms of trust, networks and norms increase through use and diminish if not used. Being a political scientist Putnam's work is based on identifying factors determining the democratic performance of societies. He argues further that the level of civic culture in any society could best determine the functioning of democracy and the performance of institutions. For Putnam, civic culture of any society is characterized by the situation where members of the society exhibit trust with each other, have a strong sense of solidarity and show willingness to engage in public affairs. Putnam's notion of civic culture is founded on the idea that from associations emerge norms of reciprocity that enable societies to operate well. In other words, voluntary associations, which serve as networks of people, will help foster mutual cooperation, collective action and democratic performance within the society, through mutual trust and reciprocity.

The three definitions above represent three major strands of literature about the concept of social capital. Putnam places more stress on membership in voluntary organizations. He also

emphasizes the formal structure or network of relationships, unlike the definitions of Bourdieu and Coleman. These structural dimensions of Putnam's definition of social capital are more applicable to cooperatives because they are voluntary organizations with a formal type of structure. Moreover, his definition focuses on such aspects as community and collective action more than Bourdieu's and Coleman's definitions do. Some scholars argue that the community perspective of social capital have emerged as the dominant paradigm in development literature (Quibria 2003; Rankin 2007).

### **2.1.2 Forms of Social Capital**

Just as there is no universal definition of social capital, scholars are divided about its various forms. Coleman (1988) distinguished between three forms of social capital: i) obligations, expectations, and trustworthiness of structures, ii) information channels, and iii) norms and effective sanctions. Putnam (1993), on the other hand, differentiated between bonding and bridging social capital. Others have used bonding, bridging and linking forms of social capital (Woolcock 1998; Narayan 2002; Szreter & Woolcock 2004; Hyyppä 2010a). Bonding, bridging and linking social capitals are probably the most commonly described forms of social capital in the literature. Bonding social capital refers to the relationship and cooperative behaviour among the people of a homogenous group who share common demographic and socio-economic characteristics. Such capital exists within family, close relatives and neighbours. Bonding social capital is associated with rather close types of bonding between and among the members where restricted membership is practiced. Bridging social capital, on the other hand, brings together people from diverse social backgrounds; they develop interpersonal ties in a bid to attain common goal. Linking social capital involves networks and ties of a particular community with states or other agencies (Bhandari & Kumi 2009). This generic differentiation of social capital is widely used in the literature.

Likewise, Uphoff and Wijayaratna (2000) distinguish between structural and cognitive forms of social capital. According to them structural social capital is related to social networks, roles, rules, procedures and precedents, whereas cognitive social capital includes norms, values, attitudes and beliefs that predispose people in social relation for cooperative behaviour. While the structural form facilitates collective action, the cognitive form helps create and maintain a conducive environment for collective action of mutual benefits to take

place. Moreover, Grootaert (2002) adds a collective action form to the structural and cognitive forms of social capital.

### **2.1.3 Measurement of Social Capital**

Just as various scholars have defined social capital from different perspectives, there is no consensus in its assessment or measurement. The concept of social capital has been analysed from various perspectives using various tools and indicators (Gómez-Limón et al. 2013). For example, Narayan and Cassidy (2001) assert that interpretations of what social capital is and is not are diverse at operational level and so are the methods used to measure it. Further, Krishna and Shrader (1999) posit that while some studies have assessed social capital solely in terms of network density, others have used measures of trust to gauge the level of social capital. Similarly, Krishna and Uphoff (1998) assert that a valid tool for measuring social capital should essentially consider both the structural and cognitive dimensions. From the methodological perspective as well scholars are divided. For example, Hyypä (2010b) contends that a qualitative method can be used to explore a new concept like social capital and to identify its dimensions that are difficult to operationalize into quantitative indicators. He further argues that qualitative methods also help in establishing causal links between, for example, social capital and its returns.

The World Bank has developed quantitative as well as qualitative tools for assessing social capital in a particular community (Kawachi 1999; Krishna & Shrader 1999; Grootaert & van Bastelaer 2001). These tools, do not give measures to assess the social capital in an agricultural cooperative both at organizational as well as individual levels. Likewise, following Grootaert, Narayan et al. (2002), Hong and Sporleder (2007) developed a framework to measure social capital in agricultural cooperatives at general level and cooperative level, employing three dimensions: structural, cognitive and collective action. Other scholars have measured the social capital in particular settings by developing and using the Social Capital Index (SCI) (Krishna 2004; Gómez-Limón et al. 2013).

Since social capital is a complex concept it is hard to measure using simple proxies (Fukuyama 2002; Harpham et al. 2002). Moreover, most of the studies about measuring social capital are based in the context of developed countries so may not be applicable in the context of developing countries. Likewise, some of such studies measured consequences and outcomes of social capital and could only capture a limited range of its components.

Similarly, membership in formal organizations is a widely used indicator of social capital. However, some argue that this may not truly reflect the social capital stock of a person or the level of social capital of a particular community (Krishna 2004; Rankin & Russell 2010). Specifically, in a developing country context there is a tendency of individuals to assume membership in several voluntary organizations in the expectation of gaining material benefit, with no consequent substantial impact on their stock of social capital (FAO 2010). Hence, given the variations in measurement techniques of social capital and some underlying limitations of quantitative measurements, as mentioned before, qualitative assessment rather than quantitative measurement based primarily on the perception of the research participants seems more conceivable.

## **2.1.4 Importance and Benefits of Social Capital**

### ***2.1.4.1 Benefits of Social Capital: Empirical Evidence***

The positive role of social capital for economic development, and in the progress of any society, has been widely discussed in the literature. Social capital has been reported to: facilitate co-operation by lowering the costs of working together; help in confidence building of individuals to invest in collective activities; help in reducing potential risk through its management and social insurance; ensure better management of common and shared resources, through group action; help in lowering transactions costs and increase ability to exploit economies of scale; enhance actors' capacity to innovate e.g. through membership of farmers' research groups which are well connected to research agencies and to sustain activities beyond the life of projects; and ensure improved access to information and services including better overall links between external organizations and the community, resulting in greater empowerment of the poor and greater influence over policies and legislation (DFID 1999)

Empirical evidence has shown positive impact of social capital in various fields including health (Kennedy et al. 1998; Kawachi 1999; Rose 2000; Cattell 2001; Kawachi & Berkman 2001; Veenstra 2002; Wakefield & Poland 2005), organizational management (Adler & Kwon 2002; Widén-Wulff & Ginman 2004), rural and community development (Dhesi 2000; Winters et al. 2001; Bernard & Spielman 2009; Ates & Terin 2011), natural resource management (Pretty et al. 2002; Adger 2003; Pretty 2003; Ur-rehman 2008), and development partnerships with government (Evans 1996).

#### ***2.1.4.2 Social Capital and Rural Livelihood***

At least 70 % of the world's very poor population lives in rural areas (IFAD 2010) whereas this figure is even higher for South Asia where four-fifths of all extremely poor people live in rural areas. South Asia is also the home of more than 70 % of the world's poor population living on or below US\$ 1.25 a day. Poverty is, therefore, largely a rural phenomenon. The majority of poor people live in remote and marginal areas such as mountains, dry lands and deserts where the quality of natural resources is poor. Communication and transportation networks are also poor in such rural areas with weak institutions (IFAD 2011). IFAD posits that although countries are making progress in achieving a high rate of economic growth and urbanization, rural poverty seems to be a principal development agenda in most of the developing countries for some years to come.

Agriculture is the main component of their livelihood framework for most of rural people; agriculture is the only major source of employment and income. With a dwindling natural resources base suffering unsustainable use triggered by population explosion, and due to the increasingly visible impact of climate change, smallholder farmers have been increasingly marginalized and becoming vulnerable with consequent threats on the sustainability of rural livelihoods (IFAD 2011).

De Haan (2000), following the previous work of prominent scholars including Blaikie et al. (1994), Chambers & Conway (1992), Chambers (1995) and (DFID 1999), suggests access to five forms of capital in an actor's livelihood strategies (Figure 2.1). According to him, these five capitals are:

- human capital –the knowledge, skill, experience, creativity and innovativeness of a person;
- natural capital- natural resources like land, water, forest and pastures and mineral reserves;
- financial capital- savings and cash inflows together with access to loans and credit;
- physical capital- physical infrastructures and services such as food stock, livestock, jewelry, equipment, tools and machinery; and
- social capital - the quality of relations among people.

Unlike other forms of capital, social capital is rather intangible and is embedded in social relations. It is an asset accrued to the individual by virtue of being a member of any social group. Moreover, social capital is of particular importance for poor and marginalized people as it is one assured form of capital on which they can draw to mobilize the other four capitals to earn a satisfactory living.

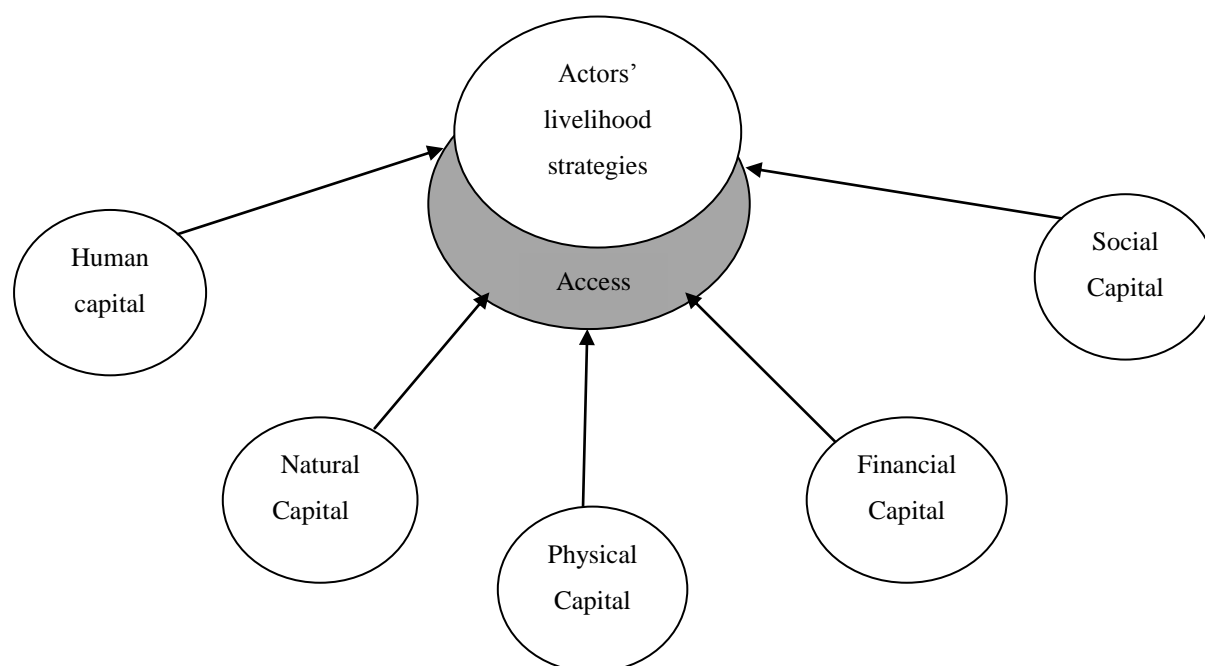


Figure 2.1: Actors' Livelihood Strategies and Five Vital Capitals (De Haan 2000)

Scholars argue that social capital is a necessary factor for long-standing impact of physical and human capital (Ostrom 1995). Moreover, it plays a crucial role in enhancing collective action (Putnam 1993; Ostrom & Ahn 2009). Grootaert and van Bastelaer (2001) suggest that social capital can help transform the prospects for agricultural development and more generally help alleviate poverty for individuals and for countries as a whole. Empirical evidence shows that social capital contributes variously in rural livelihood improvement, in general, and agriculture and natural resource management, in particular, as discussed below.

#### i) Better and Effective Management of Natural Resources

Evidence shows that social capital can help in managing natural resources more effectively. Uphoff and Wijayarathna (2000) studied how social capital worked and members benefitted from a farmer organization set up under an irrigation scheme in Sri Lanka. They found that

increased crop production was realized by the farmers even at the time of deficit water supply by virtue of organized group action to manage “deficit water supply”. They argue that social capital can become greater and more effective if reinforced by the results of effective collective action. Moreover, Dale and Sparkes (2008) found that the formation of loosely structured, self-organizing and non-hierarchical network structures could create an enabling environment in mobilizing social capital to protect a pristine watershed in Canada from commercial use by an outside corporate giant. They also found that critical nodes in the network, i.e. community leadership, played a crucial role in maintaining and mobilizing bridging and linking social capital. Likewise, from the analysis of four farmer groups set up to learn how to jointly manage local natural resource issues Kilpatrick (2007) found that social capital was a key determinant of group effectiveness and that the social capital was more effective when it comprised a balance between bonding and bridging networks, and included shared values in relation to the purpose of the group. Likewise, Pretty and Buck (2002) contend that social and human capitals, enhanced by group social learning, are necessary for the sustainable management of natural resources. Based on empirical evidence, they argue that sustainability of development interventions can be assured after project termination when local people are involved in project planning and implementation, and that there are high chances of projects being unsustainable where no adequate attention is given to institutional development and local participation.

## ii) Technology Adoption

Social capital can also help enhance the rate of technology adoption. While studying factors influencing adoption of conservation practices by the farmers in Southern Philippines Cramb (2006) found that participation in group based training events and membership in a landcare group<sup>1</sup> significantly influenced the adoption of conservation measures by the farmers. Farmers drew on their stock of bonding social capital to form land care groups and a land care association to build a stock of bridging social capital linking them to information, training and resources from outside their immediate locality. Moreover, social values and norms also count while making a decision about adopting agriculture technologies or practices. Munasib and Jordan (2011) found a positive effect of associational membership on decisions about adopting sustainable agriculture practices and the extent of their use among Georgian farmers. They believe that social networks were important in channelling and in diffusion of

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<sup>1</sup>A farmer group committed to conservation farming.

agriculture information and that associational activities lead to more effective communication. They further assert that people's involvement in community affairs through any formal channel may affect their preferences and make them more socially responsible and, thereby, more sensitive to the environment. They also contend that associational memberships, by providing information about, and hands-on techniques of, sustainable practices help to maximize profits at the individual level.

### iii) Accessing Information

Social networks are an important means to access information and other resources for the rural poor, whose productive assets and human capital are often minimal and who have little institutional support to draw on. From the case study of one of the villages in Northern Vietnam, Hoang et al. (2006) found that kinship networks served as an important channel for accessing agricultural information and was rated as a preferred source of information to any formal networks. However, it was revealed that social stratification mattered when it came to access to information. Powerful well-off and influential members, who had direct contact with formal institutions set up by the government for farmers' welfare, had more access to agricultural information than those who were poor, had no or little land or belonged to a small group or unimportant lineage.

Besides, Mubangizi (2003) also examined the potential role of social capital in improving living conditions of people within their livelihood frameworks in rural South Africa and concluded that drawing on social capital was a useful means to increase rural people's income especially for those who were poor. Likewise, Largey (2014) found lower income individuals tend to rely on informal links of family and friends in meeting their livelihood needs. Similarly, Buckland (1998) reviewed NGO-mediated livelihood improvement endeavours in Bangladesh and found that such NGOs engineered an accumulation of physical and human capital in rural settings by virtue of social capital. Such social capital was attributed to the cooperative behaviour between service provider NGOs and the recipient beneficiary group members through the establishment of norms and networks.

This section reviewed the literature on the general concept and importance of social capital. In sum, the review presented in this section shows the growing popularity of the concept of social capital in the social science literature despite having no universally accepted definition, forms and measurement techniques. Evidence shows that social capital, in general, plays a



crucial role in rural livelihood improvement through enhancing access to other forms of capital of rural people. However, most of these studies were carried out in developed countries context and that in the context of African countries. The next section will highlight the literature on building and creating the social capital.

## **2.2 Building or Creating of Social Capital**

Previous sections reviewed the literature on the importance of social capital in rural livelihoods. Building or creating this particular form of capital in rural communities can be expected to contribute to improve rural livelihood by helping rural people in accessing other forms of capital. This section reviews literature on building or creating of social capital. The review presented in this section will set the stage for the conceptual framework on building of social capital within the rural agricultural cooperatives.

While spontaneous development of social capital is possible, empirical evidence suggests that social capital can be built through deliberate efforts and interventions. While Putnam (1993) contends that social capital is accumulated slowly over the time, scholars like Schneider et al. (1997) and Hall (1999) contend that social capital can be built with deliberate efforts and in a relatively short time. They contend that social capital may not be always a historically fixed endowment. Moreover, Warner (1999) posits that bonding and bridging ties are formed through naturally occurring interactions between various actors. They add that in the communities where such interactions do not naturally occur, various interaction forums created intentionally can encourage development of social capital.

### **2.2.1 Government Interventions**

Literature suggested direct and indirect role of the government in building social capital and civic culture, mainly in developed economies. For example, Darke et al. (1998) found that the Australian Capital Territory (ACT) government funded Connecting Communities Project, developed to support indigenous families to assist their children's learning helped in building social capital. The project brought school community, indigenous community, teachers and other stakeholders together, increasing the level of participation of parents in their children's education and supported interaction between the stakeholders, which in turn, enhanced children's engagement in learning activities and also increased their confidence level as the parental support received had reinforced the value of their learning at school. Likewise,

creative action by government organizations also can foster social capital. Evans (1996) asserts that helping communities to build social capital by encouraging them to be organized and linking mobilized citizens to public agencies can enhance the effectiveness of the government. Basile and Cecchi (2005) assert that supplying better levels of public services by the government creates the climate of trust in collective action, in a community with a poor stock of social capital, and this can help build social capital in such communities.

Moreover, some scholars argue about the crucial role of the government in social capital building. For example, scholars have shown that government can play an important role in building local social capital by decentralizing power (Evans 1996; Potapchuk et al. 1997). In sum, as Lowndes and Wilson (2001) argue, while the governance is affected by social capital as suggested by Putnam (1993), it also influences building and utilization of social capital.

### **2.2.2 Community-based External Intervention**

David and Asamoah (2011) found that through the participation in integrated crop and pest management (ICPM) farmer field schools (FFS) Ghanaian cocoa farmers were able to develop bridging social capital by creating new networks for necessary support and exchange of knowledge and experiences among wider farming communities beyond FFS. This extended to bonding social capital as FFS participants continued to meet in groups even after the completion of the FFS. Likewise, the World Bank supported community driven development (CDD) initiatives in Thailand were found to have helped build social capital in the project participating villages by helping local community to create bonding and bridging networks of beneficiaries (Chase & Christensen 2009).

Similarly, Dowla (2006) showed how social capital building oriented practices of outside support institutions may cultivate social capital among target beneficiaries. He observed building of social capital through the successful endeavour of Grameen Bank in Bangladesh. He contends that although the creation of social capital was not the prime goal of the Grameen Bank, it enabled the creation of social capital to ensure that credit delivery ultimately led to qualitative changes in the lives of the members. Drawing on Putnam's definition of social capital he showed that the Bank staff first tried hard to win the trust of poor people, for example, being available to provide assistance following natural disasters. Once they were able to cultivate trust among the borrowers, the latter reciprocated through timely repayment and discouraging defaulters in the group. The bank also helped to establish

several norms including transparency in financial transactions and credit discipline at micro and macro levels which later became local culture. Periodic meeting of borrowers' groups helped to expand social networks beyond immediate family and kinship groups. Members used such networks to expand social exchanges and to meet social obligations in the village.

### **2.2.3 Group Based Activities**

Evidence shows group learning builds social capital. Kilpatrick et al. (1999) argue social capital is accumulated through interactions among farmers in a rural Australian context. They found that development of the social capital took place as the outcome of the learning activities among the farmers. Social capital thus developed, in turn, also assisted in the learning of such member farmers. They conclude that a farmers' informal learning forum can serve as the platform for interaction, which can eventually build social capital elements of networks, commitment and shared values through the development of shared language, shared experiences, trust, self-development and fostering identification with the community. Likewise, group production activities created reasons and places for the people to meet and strengthening social networks (Mubangizi 2003). Hence, the social capital thus developed not only fostered economic development of the community, it also contributed to empowering people, building their confidence and giving them a sense of commitment of taking charge of their own lives.

Kilpatrick and Falk (2003) observed simultaneous building and utilization of social capital in structured and informal learning activities of Tasmanian island farmers in Australia. The study concluded that group learning activities can build social capital resources which have the potential to transfer beyond the agricultural community. Similarly, from the study of farmers' forum for non formal education and training in eastern Australia, Kilpatrick and Bell (2001) found that farmers learnt from experience sharing by fellow farmers through subject specific training sessions; they had access to outside support as well by virtue of the forum; and they developed self-confidence and inter personal communication skills as the outcomes of participation in the forum. Moreover, knowing each other and shared experiences established a climate of openness among the farmers. They assert that getting to know each other is crucial in developing shared values and trust building among the member farmers that help recognize fellow members and the group as a whole as a credible source of support for enhancing farm performances. They conclude that social capital is built by the group. Horizontal social capital in terms of shared values, norms and mutual trust is generated as

member farmers learn together in the group. Social capital is used as members make changes in their farm businesses leading to enhanced farm performances.

#### **2.2.4 Networks of Business and Common Ancestor**

Lyon (2000) studied creation of social capital in agriculture business in terms of trust, networks and norms. He examined how trust was created among farmers, traders and agriculture input suppliers in Ghana and found it was built through various mechanisms including networks of working relationships, customer friendship, pre-existing networks and intermediaries.

Moreover, networks of kin and neighbours descended from a common ancestor can cultivate social capital. Durston (1998) asserts that social capital can be cultivated in the society where 'acivic' norms and practices predominate. From the study of poverty reduction program in rural Guatemala he concluded that networks of kin and neighbours descended from a common ancestor can be created to cultivate social capital in order to empower villagers as part of the effort to achieve a sustainable reduction of poverty.

#### **2.2.5 Cultural Capital**

Cultural capital also plays a role in building social capital. Sutherland and Burton (2011) examined what resources farmers were able to access informally and how this social capital was generated and maintained in a farming community in Scotland. From the cases of labour and machinery exchanges among the farmers they found that farmers who could show symbols of good farming and demonstrated reciprocity in (informal) labour exchange were likely to further build social capital. They concluded that cultural capital was more important in accessing social capital for small farmers than larger farmers as the latter may rely more on heavy machinery and hired labour.

In summary, the review presented in this section has shown that social capital can be built by unintentional or deliberate attempts or interventions. Especially, in developed economies social capital can be built through deliberate actions and interventions of the governments aimed at building social capital. The review has also shown community based outside development or support interventions can also foster the social capital building especially in developing country contexts. Likewise, in farming communities of both developed and

developing countries, group based activities, networks of business and kinship, and cultural capital can help foster building of social capital. The review, however, did not reveal how social capital building takes place in farming communities in course of development of agricultural cooperatives. Moreover, no evidence was found on how thus built social capital is utilized and what are the likely impacts of social capital on rural livelihood. The next section will examine the literature on the cooperative as an important instrument or vehicle for improving rural livelihoods.

## **2.3 Cooperatives**

This section will present the review of the literature on the cooperative as an instrument for collective action in rural farming communities in general, and as an important component of the rural development strategy in developing countries. The section reviews the concept and importance of the cooperative form of business and the roles played by the cooperatives sector in rural and economic development. Cooperatives sector development as a rural development and poverty reduction strategy in Nepal will also be examined at the end of this section.

### **2.3.1 Definition and Types of Cooperatives**

A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise (ICA 2012). It is a business owned and democratically controlled by the people who use its services and whose benefits are derived and distributed equitably on the basis of use (Frederick 1997).

A cooperative is a non-profit organization comprising persons with a common objective of collectively achieving a goal. According to ICA cooperatives are based on the values of self-help, self-responsibility, democracy, equality, equity and solidarity (ICA 2012). In the tradition of their founders, cooperative members believe in the ethical values of honesty, openness, social responsibility and caring for others. The seven principles of cooperative are: voluntary and open membership, democratic member control, member economic participation, autonomy and independence, education, training and information, cooperation among cooperatives, and concern for community (ICA 2012).

Quite often, common people and even scholars are found using the terms ‘cooperative’ and ‘agricultural cooperative’ or ‘farmer cooperative’ as one and the same. The reason could be the fact that in the past century cooperatives became popular worldwide as a powerful means to uplift socio-economic conditions of the rural farming community. However, the cooperative model can be applied to any business activity. Some common sectors of cooperative business include agriculture, banking and credit, consumer, fisheries, health, housing, industry and services, insurance and travel (ICA, 2011). Based on the services they provide to the members agricultural cooperatives are commonly classified into three broad categories, namely: marketing cooperatives (handle, process or manufacture, and sell farm products); farm supply cooperatives (purchase in volume, manufacture, process or formulate, and distribute farm supplies and inputs such as seed, fertilizer, feed, chemicals, petroleum products, farm equipment, hardware, and building supplies); and service cooperatives (trucking, storage, ginning, grinding, drying, artificial insemination, irrigation, credit, utilities, and insurance (Ingalsbe & Cropp 1989).

### **2.3.2 Importance of Cooperatives for Agricultural and Rural Development**

Poverty is considered a major threat for world peace and stability. Therefore, bilateral and multilateral donor agencies are reviewing their aid strategies with the goal of transformation of economies and societies in the developing world through fundamental changes in economic structures, governance and institutions, and human capacity so that countries can sustain further economic and social progress without depending on foreign aid (OCDC 2007). The renewed focus on cooperatives has also come as an important strategy to help achieve these goals.

Cooperatives are seen as a vehicle of rural development and poverty reduction in most of the developing countries (Rankin 2007). They have proved their worth in uplifting the socio-economic condition of their members (Garforth 1994; Calkins & Ngo 2010; Ates & Terin 2011). OCDC (2007) highlighted some of the remarkable achievements made by the cooperatives in economic prosperity of societies, particularly in developing countries. These included dairy cooperatives in India and agricultural cooperatives in Zambia; ICT cooperatives in rural America after the World War II, Poland, Albania, Argentina and Bolivia; electric service cooperatives in the Philippines, Bangladesh India and Bolivia; financial service cooperatives in Mexico, the Philippines, Bolivia, Nicaragua, Romania, Poland, Ecuador, El Salvador, Guatemala, Honduras, Jamaica and Russia; housing and

community cooperatives in Poland, Bosnia and Herzegovina, and the Philippines; insurance services cooperatives in Guatemala, Colombia and Dominican Republic; and youth cooperatives in South Africa. Empirical evidence shows cooperative organizations have proved their worth in uplifting the socio-economic condition of their members (Garforth 1994; Anonymous 2007; Calkins & Ngo 2010; Ates & Terin 2011) together with sustainable management of local natural resources (Uphoff 1992; Adger 2003).

Agricultural cooperatives are a pillar of agricultural development and food security (IFAD 2012). Highlighting the benefits of agricultural cooperatives, IFAD contends that as a member of a cooperative smallholder farmers can enjoy enhanced bargaining power and resource sharing, can negotiate better terms in contract farming and pay lower prices for agricultural inputs like seeds, fertilizer and equipment by being a part of a larger group.

Dung (2011) asserts that agricultural cooperatives are considered to be the most important organizations for supporting rural development in general, and agriculture development in particular, through offering activities and services aimed at farmer welfare. Such organizations are, therefore, often considered as a means to facilitate the process of socio-economic transformation of people in farming profession.

### **2.3.3 Development of Cooperatives in Nepal**

#### ***2.3.3.1 Historical Development and Current Status of Cooperatives***

A culture of mutual cooperation through setting up various informal institutions such as *Guthi*, *Parma*, *Dhikuri*, *Dharmabhakari*<sup>2</sup> has been in place since time immemorial in Nepalese societies (DEOC 2012). However, the systematic promotion and development of the cooperatives sector started with the establishment of Department of Cooperatives (DEOC) in 1954 within the Ministry of Agriculture. The first co-operatives formed in Nepal were co-operative credit societies with unlimited liability created in the Chitwan District as part of a flood relief and resettlement program in 1956. The cooperatives development program in Nepal was initially started as a part of the government overall rural development program (Luintel 1994). Cooperatives were formed to promote the concept of self-help among the rural people, and effectively and efficiently to mobilize the local resources for the overall wellbeing of the people.

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<sup>2</sup>Local names of traditional forms of grassroots people's associations in Nepal.

The first ‘cooperatives societies act’ was enacted in 1959. From then until the new ‘cooperatives act’ was promulgated in 1992, affairs related to cooperatives sector development and the cooperatives themselves were handled and carried out under the direct guidance and management of government sector. As in many other developing countries, the cooperatives movement in Nepal also faced setbacks in the 1980s after rapid growth in 1960s and 1970s. The main reason behind the failure of the cooperatives was because of the faulty approach adopted by then regime to cooperatives development as cooperatives at that time did not largely uphold established cooperatives principles (Upadhyaya 2000). Government would appoint members in the board of directors, who would act more to serve the political interests of the government rather than serving the interest of the local people. Upadhyaya (2000) further argues, under the legal, regulatory, and policy environment that prevailed at that time, the cooperatives were neither organized by local initiatives nor managed by local people

The Co-operative Act 1992 has provided an opportunity for the Nepalese people to establish independent and autonomous co-operative societies by themselves, according to their capacity to fulfil their own needs (DEOC 2012). Moreover, the new act has its foundation on basic cooperatives principles and has also provided a legal base both for the establishment of co-operative societies, unions and federations and application of co-operative values, norms and principles into practice (DEOC 2012). It is estimated that some three million people are affiliated in more than thirty thousand cooperatives, and more than fifty four thousand people are employed directly in Cooperative business in Nepal (MoCPA 2015). Agriculture related cooperatives were the second most (25.88%) prevalent nature of cooperatives after the saving and credit cooperatives (MoCPA 2015).

#### ***2.3.3.2 Importance of Agricultural Cooperatives and Policy Supports to Cooperative Sector Development***

Nepal’s interim constitution of 2006 has accorded the co-operative sector as one of the three pillars of national development, the other two being public and private sectors. Accordingly, subsequent periodic plans have emphasized the cooperatives sector as the driver of socio-economic transformation in the country (NPC 2013; MoF 2014). The main objective of cooperatives sector development mentioned in these plans is to create a basis of economic prosperity, social transformation and equitable development by mobilizing labour, skill, capital and resources of general people for collective well-being through co-operatives (NPC



2013). FAO (2010) also highlights the need of the farmer organizations at the grassroots level to foster agriculture and rural development endeavour in Nepal.

Moreover, while various socioeconomic, institutional, physical, and political factors may have constrained the commercial growth of agriculture in Nepal, many small farmers lack an organized forum which could initiate collective actions to plan and manage production and marketing activities and establish effective linkages with external agencies (Upadhyaya 2000; FAO 2003). Karkee (2008) also highlights the need for an institutional arrangement that could foster collective action of small farmers in Nepal in order for reducing transaction costs and associated risks, promoting local resource based technology, and provisioning an effective market information, among others. Likewise, Upadhyaya (2006) asserts that farmers in Nepal organize themselves into a group or cooperative to achieve economies of scale in production, to access to distant markets and to receive development services and inputs more effectively and efficiently.

Farmer or agricultural cooperatives are the main formal representative farmer organization operated at the grassroots level in rural Nepal. Generally speaking, there are two approaches to the formation of the agricultural cooperatives. In one case, farmer groups are graduated to the cooperatives. In the other case, cooperatives are formed directly drawing membership from collection of local residents. In both the cases cooperatives are established by the formal registration in the competent cooperative authority as per the Cooperative Act, 1992.

Agricultural cooperatives are operated as business-oriented social organizations and for the purpose of accessing benefits provided to cooperatives from the government (FAO 2010). There has been a remarkable growth in the number of cooperatives in recent years and one of main reasons for such growth is attributed to the government extension and farm sector policy of supporting farmers through the cooperatives. For example, government policy of distributing subsidized fertilizers through the agriculture and related cooperatives has spurred the trend of forming cooperatives in rural and peri-urban areas (Shrestha 2010).

This section provided the review of pertinent literature on concept and importance of cooperative, in general, and agricultural cooperative, in particular in global as well as Nepalese context. In the context of Nepal, the literature was mainly found to be focused on the role of cooperatives on agriculture and rural development in policy and practices. It, however, did not reveal any empirical evidences to claim such assertions. The next section

will highlight the literature on linkages between cooperative and social capital as the two important concepts used in rural livelihood improvement and overall rural development.

## **2.4 Cooperative and Social Capital**

Cooperatives and social capital are equally popular concepts among the scholars and practitioners of rural community development. Previously, the two sections above highlighted the importance of these concepts in rural livelihood. Building on the previous sections this section will review the relationship between these concepts and their significance in rural livelihood.

### **2.4.1 Influence of Social Capital in Cooperative Formation and Functioning**

Cooperatives are social capital based organizations, as creation and functioning of the cooperatives in the rural community are dependent on social capital (Valentinov 2003; Hong & Sporleder 2007). Valentinov (2007) posits that the significance of social capital for the economic organization comes from the fact that the quality of inter-agent relations, expressed in terms of trust, learning, and culture, affects the ways in which the economic activity is organized. He further argues that the presence of social capital is a major requirement for the creation and maintenance of member-oriented organizations. He, therefore, argues that the agriculture producer cooperative is the most social capital dependent form of organization as its creation is possible only through the consensual decision by a group of agricultural entrepreneurs; and its continued operation depends on mutual trust between members, level of their knowledge, their sharing of the same set of basic values, and their adhering to common rules.

In other words, success of agricultural cooperatives is highly dependent on quality of interpersonal relation among members, primarily trust. Hong and Sporleder (2007) also assert that agricultural cooperatives possess much more social capital than any other business organizations. For them, cooperative by design is a network organization which is formed with the motivation of mutual benefit and the expectation of collective actions among members. Moreover, Normark (1996) argues that social capital in the form of shared ideas, trust and mutuality between members in the initial phase of cooperative business may help developing the glue that brings the members together. He maintains that the development of cooperative therefore may well rely on the social capital within a larger context of society.

Likewise, Lang and Roessl (2011) posit that it is critical for establishing community-based cooperatives that founder members can access and mobilize diverse resources embedded in their personal networks or social capital as Burt (2009) asserts that such new ventures rely heavily on the pre-existing social capital of prospective members in order to identify and access opportunities and external resources. Similarly, Ruben and Heras (2012) found that productive and economic performance of agrarian cooperative was substantially enhanced by intra-community 'bonding' social capital.

#### **2.4.2 Role of Cooperatives in Building of Social Capital**

Cooperatives can be the vehicle of socio-economic transformation of rural communities. Moreover, it is one of the forms of non-government institution which has the capacity to create or develop social capital (Melece 2013). Gómez-Limón et al. (2013) emphasize the importance of association of grassroots people in rural development endeavours. They contend that such associations help foster social capital building in rural communities which in turn significantly influence the dynamics of development in rural areas with ultimate impact on the viability of rural communities and social cohesion.

Cooperatives have the ability to cultivate cooperative spirit, which can be described as a feeling of trust and confidence among its members and latter's strong commitment towards the cooperative (Hong & Sporleder 2007). They use a new concept 'cooperative's social capital' and developed an index to measure this. They, however, did not study how social capital is created in such cooperatives although they suggested some measures to build social capital within the cooperative. They argue that social capital can be generated and reinforced through social interaction. Rondot and Collion (2001) also assert that support to producer organizations can be viewed as an investment in social capital, which in turn complement the investment in other forms of capital. They argue that such organizations can be viewed as part of a country's social capital. Besides providing services to the members they also provide a framework for farmers sharing information, collective bargaining and collective action.

Sabatini et al. (2013) showed that development of community based cooperatives play crucial role in the diffusion of trust and in the accumulation of social capital. Trust enhances the efficiency of exchanges and encourages investment in ideas, human capital and physical

capital as trust between the parties involved in transaction reduces uncertainty and transaction costs and enforces contracts (Putnam 2000; Sabatini et al. 2013).

This section has reviewed the relationship between cooperative and social capital in respect of broader rural livelihood context. This section has established that social capital and rural agricultural cooperatives play complementary roles in improving rural livelihood. As such, social capital contributes in formation and functioning of cooperatives whereas cooperatives provide framework in building social capital. The literature, however, seemed only suggestive and indicative about the building of social capital. In other words, the review did not suggest empirically the process and mechanisms involved in building of social capital within the framework of development of rural agricultural cooperatives. Likewise, it is not clear from the review that pre-existing social capital or that built through the development of the cooperative, help in smooth functioning and improved performance of the cooperative. Similarly, it did not mention the usefulness of the social capital existing within the cooperative to a broader rural context beyond the framework of the cooperative. Moreover, none of such studies was conducted in the context of rural Nepal. The next section will synthesize the major points emerging from the literature, identify gaps in the literature and develop research questions.

## **2.5 Summary of the Literature Review and Synthesis, Identification of Gaps and Developing Research Questions**

### **2.5.1 Summary and Synthesis of the Review**

The review of literature on concepts of social capital showed that despite the growing popularity of the concept of social capital scholars and practitioners have conceptualized it variously rendering potential variations and inconsistencies in the use of the concept in practice. Evidence shows there are empirically proven benefits of social capital in a number of areas, including the improvement in rural livelihood through enhancing rural people's access to other forms of capital. However, most of these studies were carried out in the context of developed and African countries.

Likewise, the review showed rural cooperatives as an important poverty reduction and rural development strategy in developing countries. Empirical evidence has shown the crucial role of the cooperatives in improving rural livelihood by means of collective action and collective

bargaining. In the context of Nepal, the literature was found to be focused mainly on the role of cooperatives in achieving policy and practice objectives in agriculture and rural development. However, it did not reveal any empirical evidence on which to base such assertions.

The literature review showed only little evidence on the complementary role of social capital and rural agricultural cooperatives in improving rural livelihoods. Assertions have been made by a few authors about the role of social capital in formation and functioning of cooperatives as well as cooperatives providing a framework for the building of social capital. The literature, however, did not provide any evidence of building of social capital within the framework of agricultural cooperative development in rural communities.

The review, however, showed that social capital can be built by unintentional or deliberate attempts or interventions. Especially, in developed economies governments implement policies and programs to build social capital and enhance civiness deliberately. On the other hand, in developing countries community based external interventions can foster the social capital building by chance. Besides, group based activities, networks of business and kins and cultural capital can help foster building of social capital in farming communities. However, review did not suggest any empirical evidence on the process and mechanisms of building of social capital within the framewrok of development of rural agricultural cooperatives. Moreover, evidence was lacking on how changes in social capital are manifested within the cooperative framework, as well as how thus built social capital is utilized and what are the likely impacts of social capital on rural livelihoods.

### **2.5.2 Gap in the Literature**

The prominent gaps in the literature regarding the topic of the study can be presented in terms of theory and practice.

#### ***2.5.2.1 Gap in the Theory***

The review of the literature revealed a prominent gap in the theory in terms of potential factors that prompt the local farmers to form and join the agricultural cooperative in the context of rural farming communities. In other words, there is a gap in the knowledge about how the social capital building is initiated in such communities. Likewise, there was gap in the theory of building of social capital in terms of evidence about various mecahnisms that

can facilitate the building of social capital within the structure and function of cooperatives. Similarly, a gap in the theory of utilization and impact of social capital was also prominent as the review did not suggest potential utilizations of social capital built within the cooperative and its likely impacts on overall improvement of rural livelihood.

Section 2.2 provided some evidences of the impetuses for building of social capital. Likewise, Section 2.4 provided a rationale of social capital in the cooperative and the role of cooperatives in building social capital. However, there was a clear deficiency in the theory about the building of social capital alongside the development of agricultural cooperatives and utilization of social capital in farming communities. Besides, given the fact that the review showed only little research on cooperative and social capital and no research on building social capital in rural agricultural cooperatives which, in context of rural Nepal, is a clear gap of knowledge. Since there are fundamental differences in socio-economic and several other variables between developed and developing countries, theories developed in the context of developed countries may not properly explain the social capital building phenomenon occurring in developing countries, in general, and in the Nepalese context, in particular.

#### ***2.5.2.2 Gap in Practice***

The concept of social capital is relatively new in developing countries for scholars and practitioners although social capital was there in the society by a different name since time immemorial. Accordingly, the use of this concept has been used more widely in western and developed countries. As mentioned in Section 2.2, use of the concept in developed economies is more focused on civic virtue. Whereas in developing and less developed countries the relevance of social capital is associated more with rural livelihood. Moreover, in the context of Nepal, review did not reveal any dedicated government policies and program to help foster the social capital in the community. In sum, there is a clear gap in the theory about how the concept of social capital works in a Nepalese context.

#### **2.5.3 Research Questions**

Based on the gap in the literature, the following research questions (RQ) were developed for the research.

- RQ 1: What are the triggers and drivers of social capital building and how they are manifested within the framework of development of rural agricultural cooperatives?
- RQ 2: What are the various mechanisms of social capital building within the structure and function of cooperatives and what enabling factors support the building of social capital?
- RQ 3: What are the major manifestations of change in social capital built with the development of agricultural cooperatives?
- RQ 4: What are the major utilizations and impacts on rural livelihoods of social capital built through development of agricultural cooperatives?

This section summarized and synthesized the review of the literature, identified gaps and presented the research questions for the study. In the light of the deficiencies in literature, the research questions above were developed to find answers to fill gaps in current knowledge. The next section will present the conceptual framework of the study.

## **2.6 Conceptual Framework**

Building on the previous sections 2.2 to 2.5, this section presents the conceptual framework of the study. From the review of extant literature on social capital and cooperatives it is evident that social capital is a concept that has practical implications for rural livelihoods as well as overall rural development because of its critical role in enhancing collective action. Likewise, the review has also suggested that the cooperatives, in general, and agricultural cooperatives, in particular, are vehicles or instruments of collective action. Moreover, the review has also highlighted the importance of social capital in the formation and functioning of agricultural cooperatives. The previous sections established the need and scope of social capital building within the framework of cooperative development but the literature conspicuously lacked evidence on how this form of capital can be built and utilized. The conceptual framework is designed in order to explore this critical deficiency.

Various scholars have argued that cooperatives build social capital (Wilkinson 1991; Fulton & Ketilson 1992; Putnam 2000; Tolbert et al. 2002; Zeuli & Radel 2005; Green & Haines 2007). Social capital can be built in rural communities by creating grassroots people's organizations and strengthening social interaction among local residents (Fox 1996). Zeuli and Radel (2005) posit that cooperatives serve as the platform for the interactions among member and non-members that build social capital primarily in the form of trust. They also

argue that social capital, like financial capital, is a resource individuals and a community can use to build or strengthen organizations.

## **2.6.1 Process and Mechanism of Social Capital Building**

### ***2.6.1.1 Triggers of Social Capital Building***

The first research question (RQ) seeks to explore factors that cause the social capital building process to begin. The RQ 1 also seeks to explore if such factors are linked with the formation of the cooperative. Literature says the cooperative development process builds social capital (Zeuli & Radel 2005). Although literature suggests the role of the government and development intervention in social capital building, it does not specifically tell us when and how the building process actually starts. There has to be some impetus that may prompt the initiation of the this process; no process can start in vacuum. In other words, such impetuses can trigger the social capital building process by prompting the local farmers join hands in the collective action for mutual benefit. Any incident, intervention or other local factors can trigger the process of social capital building.

### ***2.6.1.2 Drivers of Social Capital Building***

Besides triggers, the motivations of local farmers at individual and collective levels seem necessary to move the social capital building process in rural farming communities forward, because such motivations can be expected to help sustain the effect of the triggers. Such motivations can be called drivers of social capital building because such motivations can be expected to institutionalize the unorganized local people who are prompted to form and join the cooperative which provides a framework and platform for interaction of various actors and any resultant social capital building.

### ***2.6.1.3 Mechanisms of Social Capital Building***

RQ 2 is about exploring mechanisms of social capital building. Section 2.2 showed group based activities foster the building of social capital. Likewise, Section 2.4 provided evidence about the potential role of the cooperative in building of social capital. There is, however, a dearth of information in the literature about the mechanisms within cooperatives that facilitate the building of social capital.



Interaction between the actors is the necessary condition to build social capital (Feigenberg et al. 2010). Repeated interactions and transactions may develop networks, increased trust, and norms of reciprocity among the farmers, and between the farmers and other actors (Kilpatrick & Bell 2001). The central message of Putnam's concept of social capital, that interaction enables people to build communities, to commit themselves to each other, and to knit the social fabric holds true when it comes to the building of social capital (Putnam 1993).

An agricultural cooperative is basically a network structure in which farmers running their farms independently are banded together voluntarily into one entity and participate in cooperative business as owners and customers, and involve in collective activities of the cooperative designed for mutual benefits (Hong & Sporleder 2007). Such cooperative houses various mechanisms of interaction among the farmers, or between the farmers and other stakeholders with its structure and function. Such mechanisms, having largely a set *modus operandi*, serve as a platform for the farmer interactions with resultant building or reinforcing of social capital.

#### ***2.6.1.4 Manifestation of Change in Social Capital***

RQ 3 seeks the answer to the question about how changes are manifested in social capital built through the development of cooperatives. Although Section 2.2 and 2.4 provided some information, mainly assertions made by the authors about the constructibility of social capital within the cooperative, there is, however, a gap in the knowledge about how the developments or changes in social capital are expressed by the actors, especially members and executives in the cooperative.

It is argued that recurrent interactions and transactions lead to development of shared values, norms, trust, and reciprocity between and among the interacting parties. It can be, therefore, said that the development or change in social capital is expressed in terms of increased network, norms of reciprocity, and trust (Putnam 1993). These changes may occur in the relationship among the members as the bonding social capital. Likewise, cooperatives and their members develop network and relationship with other cooperative societies and their members leading to the development of bridging social capital to work for the mutual benefits. Similarly, when cooperative societies and their members are involved in interaction with government institutions and other service providers they develop linking social capital

that helps them in accessing government resources for the benefit of farming community at large.

## **2.6.2 Utilizations and impacts of social capital**

### ***2.6.2.1 Utilization of Social Capital***

RQ 4 is about exploring the utilizations of the social capital built within the framework of agricultural cooperative development. Section 2.1.4.2 provided empirical evidence on various ways in which social capital is utilized. The review of literature revealed a gap of knowledge concerning how social capital built within the framework of cooperative development is used by rural farmers.

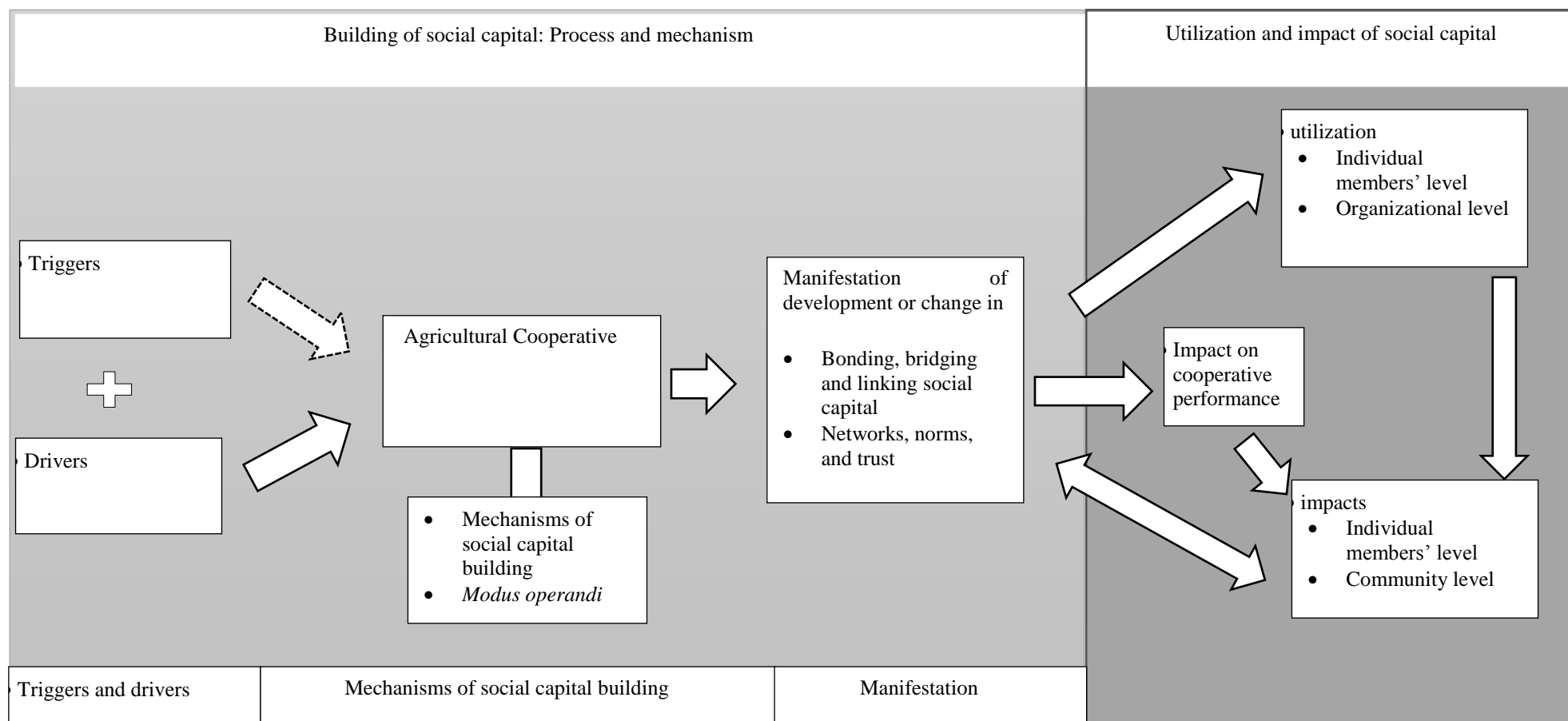
Social capital being one of the capitals of rural livelihood framework helps in accessing other forms of capital including human, financial, physical and natural capitals (de Haan & Quarles van Ufford 2001). Individual members, as well as the cooperative at large, are expected to utilize the social capital built within the framework of the cooperative as the organization exists for individual as well as collective benefits. The main utilizations of social capital in a farming community are collective action and collective bargaining (Putnam 1993; Ostrom & Ahn 2009). The utilization of social capital by members can be argued to impact variously in their livelihoods.

### ***2.6.2.2 Impact of Social Capital***

RQ 4 also seeks to explore the likely impacts of social capital built within the framework of the cooperative in various aspects of rural livelihood. Section 2.1.4.1 and 2.1.4.2 provided evidence for positive impacts of social capital in improving rural livelihood, not much information could be found on the nature and type of impact of social capital built within the cooperative framework.

Similarly, Section 2.4 mentioned that social capital plays crucial role in formation and functioning of the cooperative. It, however, did not mention whether pre-existing social capital or one built within the framework of cooperative provides support to the cooperative. Moreover, literature is silent about the mechanisms of social capital in the functioning and performance of the cooperative.

The social capital built in the cooperative can be expected to impact positively upon the livelihood of individual members. Impacts could be at community level, as well as cooperative functioning and performance. Besides the direct impact in members' livelihood, impact of social capital in improving the cooperative functioning and performance can be expected to provide various benefits to the cooperative members at the individual farmer level as well as the community level. The enhanced outcomes in rural livelihoods may in turn augment the stock of social capital in the cooperative as social capital can increase with use and diminish with disuse (Wall et al. 1998).



**Figure 2.2: Conceptual Framework: Building of Social Capital within the Framework of Agricultural Cooperatives Development, Utilization and Impact of the Social Capital in Rural Livelihood**

## **2.7 Chapter Summary and Conclusion**

This chapter has set the stage to pursue the research on social capital building in rural communities with the development of agricultural cooperatives. The chapter presented a review of literature on the notion and importance of two concepts pertinent to the study, namely, social capital and cooperatives. It then, after critically examining the literature on building of social capital, identified the prominent gaps in the literature. Research questions were then developed based on the gap in the theory and practice. Finally, conceptual framework of the study was presented based on the review of the literature, identified gaps, and the research questions. The next chapter will outline research methodology, which will describe how data was collected and analysed based on the conceptual framework presented at the end of this chapter.

## **CHAPTER 3      RESEARCH METHODOLOGY**

### **3.1 Introduction**

The purpose of this chapter is to present the methodological approach of the study and methods used in data collection and analysis. Research methodology guides the researcher in the process of systematically solving the research problem (Honadle 1981). It defines how to conduct the study of the selected phenomenon (Bingen et al. 2003). It provides a framework for the researcher to enable selection of (i) samples from the population, (ii) data to be collected, and (iii) tools and techniques for data collection and analysis. The research methodology is the strategy developed to answer the research questions. Silverman defines research methodology as a ‘general approach to studying a research topics’ (Silverman 2010, p. 121) which explains how one will go about studying any phenomenon. It basically tells us about what strategies and methods were used in data collection and analysis, and how they were used.

The chapter starts with a brief overview of the research paradigm, approach and methodology adopted in this study which will be followed by selection and description of study site and the cases. Next, under the data collection and analysis section, methods and tools used in data collection, management and analysis will be discussed. Finally, ethical considerations and their treatment and the trustworthiness of the study will be covered before concluding the chapter.

### **3.2 Research Paradigm, Approach and Methodology**

This section will highlight the research paradigm and methodology adopted by this study and the explanation for choosing the particular paradigm, approach and methodology.

#### **3.2.1 Constructivist Paradigm**

A paradigm is the basic belief system or worldview that guides the investigator, not only in choices of method but in ontologically and epistemologically fundamental ways (Guba & Lincoln 1994). Therefore, it is essential to decide on the inquiry paradigm before embarking on designing and implementing scientific inquiry. According to Guba and Lincoln (1994),

inquiry paradigms define the scope and boundary of legitimate inquiry, and they can be distinguished on the basis of answers they give to the questions of what is the form and nature of reality - how things really are and how things really work? (Ontological question); what is the nature of the relationship between knower (the inquirer) and the known (the study object)? (Epistemological question); and how can the inquirer go about finding what he or she believes can be known? (Methodological question).

For Guba and Lincoln (1994), the answer to the epistemological question is constrained by the ontological question, and the answer to the methodological question is dependent on answers to the epistemological and ontological questions. Based on the range of answers to the three questions, they suggested four paradigms of qualitative inquiry (also called alternative inquiry paradigms) as positivism, post-positivism, critical theory and related ideological positions, and constructivism. Subsequently the theorists added a fifth, participatory paradigm, to this list (Lincoln & Guba 2000).

As proposed by Guba and Lincoln, realities are multiple human mental constructions which are specific and local in nature. Unlike the sheer positivist orientation of inquirer-object dualism, the constructivist or naturalist paradigm recognises that the inquirer and the object of inquiry are inseparable, and that constructed realities can be known through mutual interactions between inquirer and the object of inquiry (Guba & Lincoln 1994). According to Lincoln and Guba (1985), there are five axioms of the naturalist/constructivist paradigm: realities are multiple, constructed, and holistic; knower and known are interactive and inseparable; only time-and context-bound working hypotheses (ideographic statements) are possible; all entities are in a state of mutual simultaneous shaping, so that it is impossible to fully distinguish causes from effects; and inquiry is inherently value-bound.

This paradigm differs most from the positivist paradigm, which rests on the ontological position that *a priori* assumption to the inquiry is possible, that assumptions can be verified or falsified through experimentation, and prediction and control of natural phenomenon are possible. The epistemological stance of positivism is that sheer objectivity in inquiry is possible in the sense that 'inquirer' and 'to-be-inquired object' are independent and hence dualism is possible. However, in an ideal naturalistic inquiry the inquirer neither manipulates the setting under study nor predetermines what variables or categories are worth measuring (Patton 2002). This research believes that realities are multiple mental constructions (ontological position) and that knowledge is created through the process of high level of

interaction between the researcher and the participant (epistemological position). Therefore the constructivist inquiry paradigm was followed in this research.

### **3.2.2 Qualitative Research Approach**

Broadly speaking, there are two types of research approach –quantitative and qualitative. Denzin and Lincoln (2000) and Patton (2002) outline the characteristics of, and differences between, these approaches. Quantitative approach, typically allied to a positivist or post-positivist approach, uses predetermined variables or response categories for data collection and analysis. Proponents claim that their work is done from within a value-free framework. In social research settings this means attempting to fit the varying perspectives and experiences of people into a limited number of predetermined response categories to which numbers are assigned, with emphasis on the measurement and analysis of causal relationships between variables, not processes. In contrast, qualitative approach is best suited when an issue is to be studied in depth and in detail, and where data collection and analysis are not based on predetermined response categories or variables that are to be experimentally examined or measured. Qualitative researchers are typically imbued with a critical, constructivist or participatory paradigm, recognising the socially constructed nature of reality and the intimate relationship between the researcher and what is studied, and therefore consider the situational constraints that shape inquiry, including its value-laden nature (Lincoln & Guba 1985). They seek answers to questions that stress how social experience is created and given meaning.

Qualitative approach generally focuses on extracting and interpreting the meaning of experiences of research participants which is in contrast with the approach of quantitative research, which generally aims to test the hypothesis about the relationship between the variables (Bloomberg & Volpe 2008). This study employed a qualitative approach, as it best fits with both my inquiry paradigm and the research questions. The research questions guiding this study are related to the experiences of the research participants, within the context of their social environment, and the meanings they make of them, and hence answers to these questions may best be obtained through using qualitative approach (Patton 2002). The study is about understanding the process and mechanisms of building of social capital during the development of agricultural cooperatives. Unearthing this complex social phenomenon needed rich understanding of contextual situation, and intense interaction between researcher and the participants (Bloomberg & Volpe 2008) which the researcher believes was possible only through employing qualitative approach. Moreover, no pre-determined variables or any



hypothesis about the development of social capital was tested. Both of these are common in a quantitative approach. Instead, the focus was on in-depth exploration of the phenomenon of social capital building in agricultural cooperatives in a real world or natural setting.

### **3.2.3 Case Study Methodology**

Case study is one of the popular of qualitative research methods. Other common types include phenomenology, ethnography, and grounded theory (Goulding 2005). Each possesses distinct characteristics that fit it with specific inquiry settings, research questions and research objectives. A case study is an empirical inquiry that investigates a contemporary phenomenon in-depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident, the aim is to answer “how” and “why” forms of research questions, no control of behavioural events is required, and the focus of the study is on contemporary events (Yin 2002). Merriam (1998) defines case study as an intensive and holistic description and analysis of an entity, phenomenon or social unit. Case study research best fits when the objective of the inquiry is to unearth an in-depth and detailed account of a particular phenomenon and associated human behaviour in the context of a given natural setting. Case study research does not seek to manipulate the contemporary phenomenon within its real life context and thereby allows retention of the holistic and meaningful characteristics of events (Bernard et al. 2008). These principles were applied for this in-depth study of social capital building in agricultural cooperatives and its impact on socio-economic wellbeing of members. This research fits well with definition and criteria of case study research given by afore-mentioned writers. The study sought to investigate thoroughly the process and mechanism of social capital building within the agricultural cooperative in the context of rural farming community. The study was carried out within the natural setting under which the cooperative was operating, and employed various techniques such as semi-structured interview, direct observation, and document analysis.

### **3.3. Selection of Research Area and the Cases**

This section mainly provides description of selection criteria for the selection of the research area and the cases studied.

### 3.3.1 Selection of Research Areas

Study area and research sites are shown in Figure 3.1. Hilly region of the Western Development Region of Nepal was selected as the study area. Nepal is commonly divided into three geographic regions: Mountain, Hill and Terai running east to west. Hill region is the largest of the three regions, occupying 63% of the country's total area and with about 43% of the population residing in it (CBS 2012). About a quarter of the country's poor people live in this region (CBS 2012). Three quarters of the hills households are agricultural households, which form 48% of the total peasant population of the country (CBS 2011). Unlike the two other geographic regions the Hill region is in chronic food deficit. About 35% of Hill households are either smallholders (< 0.5 hectare of land) or landless, and constitute the most vulnerable of seven identified vulnerable groups, from a food security perspective, in Nepal (FAO 2004 ). As discussed in chapter one this particular region is suffering most among the three regions in terms of changes in socio-economic and natural environments including land degradation and desertification, land abandonment, labour outmigration and feminization of agriculture in recent years (CBS 2013b; Paudel et al. 2014). The number of female headed households has been almost doubled in nearly two decades (CBS 2013b).

Despite these changes, the trend of farmers getting involved in market-oriented agricultural enterprises and becoming organized in agricultural cooperatives has been more pronounced in this region than the other two. The latest figure suggests this region alone covers 40% of the total area under fresh vegetables and produces the same percentage volume of the vegetables produced in the country (MoAC 2013). Given the undergoing, socio-economic, demographic, agrarian and environmental changes together with emerging challenges and opportunities witnessed the recent years, this region warrants some socio-economic studies to be carried out to better understand both the challenges and the opportunities. Western Hill region was selected for the study for two reasons. Firstly, agricultural cooperatives operating in this region were representative of similar types of cooperatives operating elsewhere in the Hill region. Secondly, the researcher's familiarity with the farming communities and local socio-political situation would help in better exploring the cases.



regional wing of the Department of Agriculture (DOA). There are five such regional wings under DOA. Western Hill region comes under the command area of RAD, Western Development Region and is based in Pokhara, the most popular tourist destination in Nepal. RAD basically oversees affairs related to public extension activities and other agriculture programs aimed at peasant farmer welfare in the region. Based on the information on the agricultural cooperatives operating in the study area they could be roughly categorized based on size of membership as small and big. Similarly, from the relative accessibility point of view majority of cooperatives fell into two tiers, namely, high and medium. Thus, a pool of thirty functioning agricultural cooperatives or multipurpose cooperatives specialized in agriculture, operating in the study area, was first identified applying the selection criteria given in Table 3.1. The criteria were developed based on the fundamental requirements to be an agricultural cooperative that suited the research context and purpose, to ensure that appropriate cases were selected.

**Table 3.1: Criteria Used for the Selection of Agricultural Cooperatives**

Criteria	Description
Legal status	Registered in competent authority as per the Cooperative Act, 1992
Age of the cooperative	Registered at least five years ago and been in business for the equivalent years or more of cooperative life
Membership	With majority of members smallholder farmers (having land holding size of <0.5 hectare)
Cooperative businesses	Involved in member-oriented one or more types of services including farm input supply, saving and credit, technical support and marketing of primary agricultural produces
Reputation/Performance	Identified by the local DADO as a better performing cooperative on the basis of cooperative businesses and service provisioning, governance, solidarity among the members and contacts and relationship with service providing government and non-government agencies

A purposive selection of four cooperatives from the pool of thirty was then made on two bases: i) relative size of membership, and ii) level of accessibility (Table 3.2). Respective cooperatives were approached, and the chief and related staffs of respective DADOs were consulted before the final decision on the selection was made. It was expected that these two bases of selection would help to capture maximum variation in the cases vis-à-vis topic of the study.

**Table 3.2: Bases of Selection of the Cases**

<b>Bases of selection</b>		<b>Cooperatives selected</b>
<b>Relative size of membership</b>	<b>levels of accessibility</b>	
Small	Medium- outskirts of hilly township	Mirmire Multipurpose Cooperative Ltd. Baglung Municipality-10, Baglung
	High- peri-urban areas	Khapaudi Agri. cooperative Ltd., Sarangkot-2, Khapadi, Kaski
Large	Medium- relatively remote or isolated area not joined by all-weather road	Jana Kalyan Agri. Coop. Ltd, Jagat Bhanjyang-2, Syanja
	High- highly accessible areas	Triyasi Agri. produce and Market Management Cooperative Ltd., Waling Municipality-8, Syanja

The four cases chosen included one case each from a peri-urban area, a relatively remote or isolated area not joined by all-weather road, a highly accessible area, and the outskirts of a hilly township. This case variety was intended to provide contextual richness and hence increase the potential to capture diversity in social capital building related aspects. Table 3.3 gives the basic information on case study cooperatives. Vegetables production was the main agricultural activity of members which was typical of agricultural cooperatives in the study area. Moreover, saving and credit was the main activity and service being provided by those cooperatives.

**Table 3.3: Basic Information on Case Study Cooperatives**

<b>Cooperatives</b>		<b>Main enterprise members' involvement</b>	<b>Major activities</b>	<b>regular total members</b>	<b>Age</b>
Mirmire	Multipurpose Cooperative Ltd.	Vegetables production	Saving and credit, Coop. farming	43	5 years
Jana Kalyan	Agri. Cooperative Ltd,	Vegetables production	Saving and credit, Coop. shop, crop insurance	142	6 years
Triyasi and Management	Agri. produce and Market Cooperative Ltd.	Vegetables production	Limited banking services, vegetable marketing, Coop. shop, crop insurance	421	5 years

Khapaudi cooperative Ltd.,	Agri.	Vegetables production	Saving and credit, Coop. shop	35	5 years
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The main unit of analysis for each case study was the agricultural cooperative as an organization. The researcher's prior familiarity with the study area and respective government agencies and their operational staffs helped considerably in the process of case selection and subsequent fieldwork.

### 3.4 Data Collection and Analysis

This section gives an account of various techniques employed in data collection during fieldwork. It also provides an overview of desktop works of data organizing, management and analysis.

#### 3.4.1 Data Collection

Primary data was collected, based on the framework given in Table 3.4, during the fieldwork in September to December 2012.

**Table 3.4: Framework for Data Collection**

Research questions	Theme of inquiry	Data collection technique(s)	Research participants
<b>RQ 1</b>	Understanding the triggers and drivers of social capital building	Semi-structured interview	Executives and members of cooperative
<b>RQ 2</b>	Recording the social capital building mechanism	Semi-structured interview, focus group, direct observation	Executives and members of cooperative
<b>RQ 3</b>	Assessing the change in social capital	Semi-structured interview, focus group	Executives and members of cooperative
<b>RQ 4</b>	Assessing the utilization and impact of social capital in rural livelihood	Semi-structured interview, focus group	Executives and members of cooperative

Yin (2002) has suggested the various primary sources of evidence for case study research as including documents, archival records, interviews, direct observations, participant observation, and physical artefacts. Not all sources may be required in every case study. However, collecting multiple sources of evidence is a key to ensure validity and reliability of any case study research.

#### ***3.4.1.1 Gaining Access to the Research Site and Case Study Cooperative***

After the cases were selected, the chairman or manager of each selected cooperative was contacted in advance of entering the field through the help of gatekeepers. Each DADO provided one staff member to guide the researcher in the field. Introductory meetings with cooperative executives were organized, in which executives were briefed on the purpose of the visit and research data collection activities. The briefing was aided by the ‘research information sheet’ prepared by the researcher and translated into the Nepalese language. Also, the UQ protocol of ethics was followed while gaining access to the field and carrying out subsequent fieldwork.

#### ***3.4.1.2 Selection of Research Participants***

Members of the cooperative were the primary research participants for each case study. In the introductory meetings a probable list of participants was discussed. The cooperative management was requested to suggest names of several members who might be willing to participate and were able to express their experiences and opinion pertinent to the topic of the study. Snowballing technique was also employed by asking existing participants to identify other probable participants.

#### ***3.4.1.3 Data Collection Techniques***

Multiple sources of information were used to gather case based and contextual data. Table 3.4 shows the distribution of research participants who took part in primary data collection activities. The semi-structured interviews with members of the cooperative, and members and executives of cooperative management board formed the major part of the primary data. Data gathered through individual interviews was triangulated by focus groups, observation and published and unpublished document. A brief account of techniques used for primary data collection is given below.

#### i) Semi-structured Interview

Interview is the most common method of data collection in qualitative research (Merriam 1998; Creswell 2012). This method is considered as the most appropriate method to develop thick description of a case or the phenomenon under study. This method also gives an opportunity to the researcher to clarify the responses from the participants and for probing (Bloomberg & Volpe 2008). Interviews can be informal, structured, unstructured and semi-structured. (Bernard 2011). According to Bernard semi-structured interview is most suitable when researcher will not generally have more than one opportunity to interview someone. An interview guide consisting of a list of questions and topics to be covered is used while administering the interview. Semi-structured interview was chosen as the main method of data collection in this study as the objective of the interview is to allow the participant to express his or her experiences and opinion freely. The researcher shares Bloomberg's (Bloomberg & Volpe 2008) logic behind using interviews as data collection method to generate data through interacting with people and thereby capturing the meaning of their experience in their own words.

An interview guide (Appendix 1) covering all four research questions was prepared. The guide was pilot tested with three members of Mirmire Cooperative. Total number of members interviewed from each case study cooperative ranged from 13 to 15. Attempts were made to cover maximum variations among the members in terms of geographical distribution, socio-economic circumstances, social group, gender, and so on. In most of the cases, prospective interview participants were contacted prior for their availability and willingness to take part in the research through telephone either by the researcher or cooperative executives. The chairman of each cooperative was selected by default for the interview to talk basically on historical development and the current situation of the cooperative. Other members of the management board were interviewed based on their availability. Likewise, one employee from each cooperative, barring Mirmire Cooperative which did not have employees, was also interviewed.

The researcher himself conducted all the interviews which helped in better understanding of the case and the context. It also helped in transcribing the interview audio tape and subsequent phases of data analysis. Before the commencement of the interview, the participant was informed about the purpose and scope of the study, based on the 'research information sheet' approved by the UQ research ethics committee (Appendix 3). The



participant was then asked to sign the 'informed consent' form (Appendix 4) or verbally record their consent. In most of the cases, participants gave consent verbally which was tape recorded. The interview with cooperative members would start with questions pertinent to basic demographic information and farming and other livelihood related questions. Interview questions covered topics including historical development of the cooperative: its genesis and initiatives taken by any person(s) or institutions to start the cooperative; reasons for joining the cooperative; involvement in cooperative businesses or activities; services and facilities being received; mode of meeting and interaction with fellow members, cooperative executives and persons or institutions outside the cooperative; change in networks, norms of reciprocity and trust among the members, and between the members and other parties; changes occurred at individual/household and community level after the formation of cooperative; major factors contributing to the existing level of cooperative performance; and issues and problems within the cooperative, if any, and suggestions for the improvement.

Mostly interviews with cooperative members were held in their homes whereas a few were interviewed in the cooperative office when they visited the cooperative. Interviews for the chairman and board members and the employees were conducted in the office of respective cooperatives. Interviews with members generally lasted approximately half an hour whereas the interviews with cooperative leadership and employees lasted for an hour or more. Interviews with the leadership and employees covered additional topics on functioning and performance of the cooperatives, issues the cooperatives faced and future plans. All individual interviews were recorded using a voice recording device.

## ii) Focus Group

Focus group was another method of data collection used in this research. Using focus groups as a research technique entails the collection of data through group interaction on a topic determined by the researchers (Morgan 1996, p. 130). In focus group discussion select individuals discuss a particular topic in an informal manner (Wilkinson 1998). It is called focus group because a particular group of participants discusses specific (focus) topics. Focus group study was carried out in each of the four cases. Participants were drawn from the cooperative members who were not involved in individual interviews. The number of participants ranged from 8 to 12 per group. The purpose of conducting the focus group was twofold: first, triangulation of the information obtained from individual interviews; second,

unearthing additional information on the topic which might have been missed in the individual interviews.

The focus group allowed the participants to express their views freely around the topic of social capital building and utilization within the cooperative. In the beginning, researcher explained the purpose of the study and that of the focus group. The researcher played a role of moderator for the discussion. He introduced the topic for discussion based on the checklist given in Appendix 2 and asked the participants to present their view on that. It was ensured that all the members participated in the discussion and none would dominate the proceedings. The researcher was assisted by a local resource person in jotting down main points of the discussion. Each focus group lasted for about an hour. The focus group discussion was also recorded using voice recorder.

### iii) Direct Observation

Direct observation is one of the sources of data collection in qualitative case study (Pauly 2010). Pauly contends that this method provides an opportunity for researchers to observe directly what is happening in the social setting and interact with participants. Direct observation technique was employed in order to observe the participants in their natural setting; their interactions and behaviours without actually participating in the activities participants were involved with. This particular method of data collection helped in gaining deeper understanding of participants' setting and context. The researcher observed the participants in their daily lives, which involved participants' engagement in farming and marketing, attending cooperative meetings and spending time in leisure, among others. Informed consent was sought and granted verbally prior to observing the participants and their actions and behaviours. All observations were recorded separately in field notes.

### iv) Document Analysis

Document analysis is another method of data collection popularly used in qualitative case study (Yin 1994; Stake 1995). This method is commonly used for triangulation of the information collected from using other methods. The documents can be analysed primarily to corroborate evidence from other sources. The document analysis also helps in developing deeper understanding of research context. Likewise, it may also add to the findings through the discovery of new knowledge about the research topic (Bowen 2009). Copies of transaction reports of the case study cooperatives; their annual reports presented in the

General Assembly; and other pertinent documents, were collected. Likewise, periodic progress reports of concerned government agencies and representative cooperative bodies were also collected and analysed. Similarly, other published and written documents pertinent to the research context and the particular cases were also collected and analysed.

### **3.4.2 Data Management and Analysis**

#### ***3.4.2.1 Data Organizing and Management***

Individual interviews and focus group discussions were conducted in Nepalese language. Audio recordings of individual interviews were simultaneously transcribed and translated in English. Several *NVivo* files were created to organize the field data using *NVivo* 10 software (QSR 2012). Interview recordings and transcripts, field notes and pertinent secondary data from each case study cooperative were stored creating a separate ‘case file’. Case-based interview data provided the information about the genesis of the cooperative, reasons for farmers’ joining, members’ involvement in cooperative affairs and activities, cooperative provided services and facilities, impact of such services at individual and community level, the perception of the reasons for the existing cooperative performance, and issues and suggestion for the further improvement in cooperative performance. Case based interview data was mainly coded against the conceptual framework designed to address research questions.

Focus group recordings were listened thoroughly several times and main points were noted down. Several other codes pertinent to the research questions were also generated from the data and were used for further analysis.

#### ***3.4.2.2 Data Analysis***

The study was multiple case studies or multi-site case studies (Bishop 2010) with the agricultural cooperative as the unit of analysis. Within-case analysis, for each of the four cases, was carried out, followed by cross-case analysis. Systematic strategies were adopted to build within case themes and cross-case categories as shown in Table 3.5.

**Table 3.5: Strategies Adopted in Case Study Data Analysis**

<b>Data analysis unit</b>	<b>Purpose</b>	<b>Strategy adopted</b>	<b>Output</b>
Individual participant of each of the case study cooperative	Search for themes or categories	Intensive reading of transcript of individual interview	Coding categories or themes
Across the participants in the same cooperative	Refining the themes	Coding and display	Refined themes and subthemes
Within-each case	Ordering and refining the themes	Rereading of individual interview transcripts	Additional themes based on discrepancies among the participants
Cross-case	Compare theme across the case	Explain the cross case theme with supporting quotation	Refined cross case themes on the basis of commonality

i) Within-case Analysis

Case description provides details of each case in a consistent way, with the focus on analytic usage of information. The case description write ups provide pure summary descriptions to help the researcher understand the cases (Eisenhardt 1989; Miles & Huberman 1994a). Case descriptions aggregate the data and organise into comprehensive, primary resource packages which then become the resource materials for further interpretive analysis (Patton 2002). Adequate time was given to develop the detailed description of each case. The case description was divided into two parts: the first part provided the contextual background or setting of the case; and second part presented within-case analysis based on the research questions and conceptual framework of the study.

A qualitative data analysis technique called content analysis was used in analysing the data in this research. Content analysis is a qualitative data reduction and sense-making effort that attempts to identify core consistencies and meanings out of a volume of textual qualitative material through coding and categorizing (Patton 2002). The primary outcomes of content analysis are patterns or themes or categories. After themes or categories have been identified, further analysis is carried out to check consistencies within the category and relationships between, and among, the categories by employing the constant comparative method.

ii) Cross-case Analysis

Numerous techniques are available for analysing qualitative data (e.g. Patton 2002; Goulding 2005; Creswell et al. 2007; Yin 2009). Yin (2009) suggested five analytic techniques for case study data: pattern-matching; explanation building; time-series analysis; logic models; and

cross-case analysis. Of the five techniques, cross-case analysis technique was used as it is exclusively used while analysing data from multiple cases. Themes and patterns pertinent to the research questions as they emerged from within case analyses were compared and contrasted to develop higher level cross-case themes (Eisenhardt 1989; Yin 2009). Discussion concerning findings was then carried out against the conceptual framework of the study.

### **3.5 Ethical Considerations**

The main objective of the ethical consideration in social science research is protecting and informing the research participants (Bloomberg & Volpe 2008). It is concerned with protecting the dignity and safety of the research participants and the general public (Silverman 2010). Social science researchers should ensure that participants are not harmed as well as seeing that their privacy is maintained and that informed consent is sought and obtained before undertaking research (Hennink et al. 2010). In this research, before embarking on fieldwork in Nepal, the researcher had applied in the School of Agriculture and Food sciences (SAFS) Research Committee of the University of Queensland (UQ) for ethical approval to the research fieldwork. The Committee reviewed the ethical issues relating to this research against the related policy and guidelines of UQ. The Committee confirmed that the research met the UQ requirements, and the application to this effect was formally approved. The following measures were taken to ensure that ethical considerations had been met and that any of the researcher's acts would not breach the standard code of conduct of doing research.

- Gaining prior approval from the concerned local authorities before entering the research sites;
- Acknowledging and respecting socio-cultural values and norms of each respondent and his/her society;
- Respecting and upholding the basic principles of human rights including freedom to express opinions and confidentiality of private information during the field work;
- Maintaining transparency through explaining the purpose and scope of the study to the respondents and other concerned authorities;
- Gaining informed consent before conducting interviews, direct observation and accessing documentary evidence; and
- Not disclosing the name of the persons and institutions involved in the study

### **3.6 Trustworthiness of the Study**

To establish trustworthiness and quality of the qualitative research, four types of tests, namely, credibility, confirmability, transferability and dependability have been suggested in design and implementation, and data analysis phases of the study (Lincoln & Guba 1985; Denzin & Lincoln 1994). Silverman (2010) on the other hand, suggests validity and reliability tests for quality checking of a qualitative study.

The credibility criterion is basically about how far the findings represent the truth about the phenomenon from the perspective of the researcher, participants or the readers, or in other words, how far findings are credible to them (Miles & Huberman 1994b; Silverman 2010). Some of the major strategies suggested in the literature (Lincoln & Guba 1985; Miles & Huberman 1994b; Silverman 2010) to establish and ensure credibility are: presenting details, also called, ‘thick description’ of the phenomenon; data triangulation through using multiple sources of information and multiple techniques or methods of data collection; maintaining logic and coherence between research questions, conceptual framework, methodology of data collection, and data analysis; constant comparative method in data analysis (Silverman 2010), and analysis of negative or deviant cases.

This study adopted most of these strategies to ensure credibility of the research. ‘Thick description’ of phenomenon under study i.e. building and utilization of social capital within the agricultural cooperatives was developed in the form of a detailed description of the case, which contained a rich description of the context surrounding the historical development and functioning of the cooperative. Maintaining internal coherence during research design was also tried through establishing links between constructivist research paradigm, research questions, assumptions and conceptual framework of the study. Another important strategy adopted was data triangulation. Data were triangulated using multiple sources of information as well as multiple methods of collection. Personal interview was the main method of data collection. However, data gathered from interviews were triangulated with focus groups, direct observation and documents analysis. Moreover, as suggested by Silverman (2010), constant comparative method was employed as one of the strategies to establish credibility, while developing and comparing themes within and across the cases. Likewise, the small numbers of negative or deviant responses were also reported. Such responses were compared with the major themes and possible reasons for such negative responses were explored.

Confirmability is essentially about ensuring that the conclusions depend on the subjects and conditions of inquiry rather than on inquirer (Guba 1981). In other words, it is a strategy that aims to help ensure that study conclusions are free from unacknowledged researcher biases. Lincoln and Guba (2010) suggested audit trial during data collection and data analysis phase to establish confirmability. Audit trial involves an examination of raw data such as field notes, audio tapes and interview transcripts, documents by the potential auditor to judge whether the inferences based on the data are logical as well as checking the quality of the findings and interpretations. In this research field notes were maintained during the field work to record the initial impression of the data, participants, and their context. Likewise, audio tapes of interviews, interview transcript, and coding book prepared using *Nvivo* (QSR 2012) were retained in the electronic form.

A dependability or reliability test checks the consistency and stability of the process of the study over the time, and across the researchers and methods (Silverman 2010). Dependability can be achieved by examining whether the inquiry processes were followed in orderly manner, understandable, well documented, and with provision of mechanisms against potential bias (Riege 2003). Audit trial which examines documentation of the process of the inquiry during research design phase also helps in establishing dependability (Lincoln & Guba 1985). In this study to establish the dependability process of case and participant selection, data collection and data analysis was described clearly and in detail. Moreover, hunches and memos were recorded during data analysis to help ensure transparency in data analysis and interpretation.

This study did not intend generalization of the findings. Conclusions of qualitative case studies are not meant for statistical generalization but for analytical generalization, in which the investigator tries to generalize a particular set of results to some broader theory (Yin 2009). Moreover, multiple case studies are analogous to multiple experiments in natural science; the results obtained from each case will be corroborated to or contrasted with certain emerging theoretical proposition in the same way when results of multiple experiments are used to reach particular conclusions about the treatment effects on certain variables. Therefore, the issue was not about generalization of findings rather about transferability. Transferability tests assess whether the conclusions of the study are transferable to other contexts (Miles & Huberman 1994b). For Patton (1990) transferability is context bound extrapolations of findings which involves the speculations on the likelihood of findings to be

applicable in other situations under similar, but not identical, conditions. Recording of detailed description of research settings and participants, and thick description of phenomenon with surrounding context in reporting the qualitative study, have been suggested as the major techniques of establishing transferability (Miles & Huberman 1994b). This study recorded the detail of settings of each of the four cases and information about the research participants. Moreover, thick description of cases was also prepared.

### **3.7 Chapter Summary and Conclusion**

This chapter has provided details of the research methodology adopted for this study. Social capital building and utilization within the agricultural cooperative was explored employing qualitative case study methodology. Four agricultural cooperatives were studied to understand the process and mechanisms involved in building and utilization of social capital. Data was collected through semi-structured interviews and focus groups drawn from members and executives of the cooperative, and through direct observation. Within case and cross case themes were built using content analysis and constant comparative methods. Issues of trustworthiness were identified and appropriate measures were taken to address such issues through an attempt to establish confirmability, credibility, dependability and transferability. The next chapter will present within-case analysis.



## **CHAPTER 4      CASE STUDIES**

### **4.1 Introduction**

The purpose of this chapter is to provide detailed case description of the four cases studied in this research. Each case description is divided into two parts: i) general description, and ii) within-case analysis.

#### **4.1.1 General Description of the Cases**

The first part of the case description provides general information about the case and its context. The general description of the case will give an overview of the evolution and present state of the case study cooperative. It describes historical development of the cooperative; its membership structure and composition; cooperative structure and governance; and the major services and facilities cooperative providing to its members.

#### **4.1.2 Within-case Analysis**

The within-case analysis gives case based finding as per the conceptual framework of the study. In multiple case study approach, within-case analysis provides the basis for cross-case analysis. Findings will be presented into two major parts: process and mechanisms of social capital building, and utilization and impact of social capital.

##### ***4.1.2.1 Process and Mechanisms of Social Capital Building***

The first section will highlight process and mechanism of social capital building within the framework of the case study cooperatives. Process and mechanisms of social capital building in this thesis cover triggers and drivers, mechanisms of building, enabling factors, and manifestation of social capital.

##### **i) Triggers and Drivers**

In the context of this study triggers of social capital building refer to the factors or incidents that initiated the process of social capital building in rural farming communities by prompting the local farmers in one place to strive for collective action of mutual benefit. Drivers, on the

other hand, represented the reasons that motivated the farmers at individual or collective level to form and join the agricultural cooperatives.

#### ii) Mechanisms of Social Capital Building

This study considered that an agricultural cooperative provides a platform for building of social capital. Mechanisms of social capital building are various forums and occasions present within the structure and functioning of the cooperative that facilitate contacts and interaction between different actors, resulting in building or reinforcing various forms of the social capital.

#### iii) Enabling Factors

Enabling factors are people, institutions and other factors pertinent to existing socio-economic, cultural, physical conditions that played supporting role in building of social capital, mainly through enhancing the effectiveness of mechanisms of social capital building and improving the extent and quality of interaction between, and among, various actors.

#### iv) Manifestation of Social Capital

Manifestation is demonstrated by various actors of change in aspects of social capital built within the framework of cooperative. Following the definition of Robert Putnam (Putnam 2000) social capital in this thesis is defined as the social networks with the norms of reciprocity and trust which facilitate certain productive action of actors associated with such networks. Moreover, three forms of social capital, namely, bonding, bridging and linking (Woolcock 1998; Putnam 2001) were considered<sup>3</sup>. In the context of case study cooperatives, bonding social capital is defined as the interpersonal relationship or network of cooperative members with fellow members and cooperative executives, based on norms of reciprocity and trust.

Bridging social capital was analysed at individual and institutional level. For the purpose of this study individual bridging social capital is defined as the network or relationship of members with non-member villagers, and other people beyond the village. At the collective level, network or relationship of the cooperative with other cooperatives, representative

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<sup>3</sup> Details on definition and forms of social capital are given in section 2.1.2 of chapter 2.

higher level cooperative bodies such as cooperative unions or representative farmers' organization represent institutional bridging social capital. Likewise, linking social capital was also analysed both at the individual as well as institutional levels. Individual linking social capital in this study is considered the network of individual member to the service providing government and non-government agencies developed by virtue of membership. Similarly, collective linking social capital is the networks established by the cooperative with afore-mentioned agencies.

#### ***4.1.2.2 Utilization and Impact of Social Capital***

Social capital built within the framework of development of rural agricultural cooperatives is utilized by members and cooperative management to fulfill various livelihoods related needs and objectives. Utilization of bonding social capital in this research was analysed at individual member as well as cooperative or institutional level. Similarly, utilization or benefit of bridging and linking social capital was analysed both at the individual and collective levels. Likewise, impact of bonding, bridging and linking social capital were also separately analysed in the cases studied. Impact was assessed for the change in the individual member or household level and the community level.

Moreover, impact of social capital in cooperative performance was also analysed in terms of role or effect of various aspects of social capital in smooth functioning and improved performance of cooperative. The impact of bonding social capital was found to be more prominent than the other two forms and accordingly receives most analytical attention. Similarly, motivations of various actors for maintaining this form of social capital are also given.

## 4.2 Mirmire Multipurpose Cooperative Ltd., Baglung, Baglung

### 4.2.1 General Description

Mirmire Multipurpose Cooperative Ltd., Baglung was selected as the case representing a relatively small cooperative from outskirts of a hilly township. The cooperative was registered in November 2007 with 27 members. The headquarters are located in Baglung Municipality-4, a half-hour walk from downtown Baglung. The command area of the cooperative comprised the whole Baglung municipality (18.66 sq. km) but the majority of members came from Wards 4 and 5 of the Municipality. Although registered as multipurpose cooperative, its activities and services were related to various aspects of agriculture production and marketing. Most of the members were farmers, engaged in various agricultural enterprises but principally specialized in vegetable farming.

The total membership in 2012 October was 43 (30 male, 13 female). While some members were also engaged in poultry and cattle farming, the majority were involved in seasonal and off-season vegetable production. From the economic point of view a majority of the members were smallholder farmers owning cultivated land ranging from 0.15 to 0.75 ha. Many farmers had also leased land from other local villagers to use for vegetable farming. Members represented the major ethnic groups present in the locality with the two major castes of Nepal, namely, *Brahmin* and *Chettri* dominant, and a few *Dalit*<sup>4</sup> members. There was a good mix of different religious groups including Hindu, Buddhist and Christians.

#### 4.2.1.1 Baglung Municipality

Baglung Municipality, the district headquarters of Baglung district, one of the hilly districts in the Western Nepal, is situated at 805 to 2150 m above the seal level on the bank of the famous Kali Gandaki River. It is a small township with 7848 total households and population size of 29,360 as per the latest census (CBS 2012). The dominant topography is gradient hill-slope. The Municipality has 11 Wards, of which numbers 1, 2, 3 and 4 comprise the core town area while seven other Wards are drawn from adjoining villages. Agriculture is the main profession of the residents followed by retail business. Rain-fed upland agriculture is characterized by the production of traditional cereal crops such as maize, finger millet and upland rice, and various seasonal and off-season vegetable crops.

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<sup>4</sup> A socio-economically backward group in Nepal

#### ***4.2.1.2 Historical Development of the Cooperative***

Vegetable farming in the outskirts and nearby villages of Baglung town was a relatively recent development, apart from local people growing some traditional leafy and other vegetables in their backyard. Until recently, in this area, despite being very close to the Baglung town and having reasonable irrigation sources and facilities, commercial vegetable farming was not practiced by local farmers.

The beginning of new millennium saw people from distant villages migrating to villages nearby Baglung town in search of better livelihood opportunities. A new settlement of migrants was also being developed in the outskirts of Baglung town including Ward numbers 4 and 5 of the Baglung Municipality. Among the migrant people was one hardworking and enthusiastic farmer with some vegetable growing experience, who had migrated from a distant village in 2003. He resumed vegetable farming activities by leasing a plot, becoming the first commercial farmer in the locality. He then led the process of formation of a farmer group (FG) called '*Sramik Bahu Uddesseye Krishak Samuha*' Ba. Na. Pa. - 1, 4, 5, ('Labour multipurpose farmer group' Baglung Municipality-1, 4, 5), with the main objective of accessing extension support<sup>5</sup> to embark on commercial vegetable production under his leadership in 2006. Members were drawn mainly from migrant villagers with some local farmers.

The FG then started to carry out various activities to support members in various aspects of farming including training on various aspects of vegetable and livestock farming. The chairman involved himself in teaching fellow farmers in the areas of his expertise and they also invited technicians and specialists from the local District Agriculture Development Office (DADO) for training in more advanced areas. The FG started a regular monthly saving scheme. Moreover, they leased 0.25 ha of land, where they started growing various vegetable and cereal crops which served as the platform for the members to learn from the expertise of the chairman. They aimed to develop the leased plot as a farm technology demonstration site and an open learning school for the members where many of them could learn aspects of vegetable farming. Each of the 25 members was required to participate in that cooperative

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<sup>5</sup> Extension supports to the farmers in Nepal are generally channelized through farmers groups and cooperatives. So, there is a general tendency of farmers to get organized in farmers groups, or join such groups, with the objective of accessing more free-of-cost extension material support and technical services from extension agents and agencies.

managed demonstrations plot. They also needed to supply their labour and contribute manure and compost. Members who failed to provide labour or manure support needed to make equivalent cash contribution. In this way, they made additional income for their group. They sold the harvest to Baglung town and the group gradually became better off financially.

When the cooperative started cultivation of vegetables and other seasonal crops in the demonstration plot, many people from outside came to see the plot and sought information about plot management. Board members and other general members were invited by other people or institutions to give talks on farming under the cooperative management. The idea of demonstration plot became very popular. Media also started to give coverage to cooperatively managed, commercial vegetable farming at this location. The plot was still being managed when the FG was transformed into the cooperative a year later, but the level of intensity eroded owing to the greater number of members in the cooperative compared to the FG. The cooperative was, however, contemplating how to revive on a bigger scale soon.

The FG was transformed into a cooperative after one year in order to accommodate more farmers and to better access the government resources and supports. Unlike a farmer group a cooperative can accommodate hundreds of member farmers. Likewise, a cooperative can enjoy a statutory status if registered as per the Cooperative Act, 1992 of Nepal. Moreover, a cooperative was deemed necessary to enjoy government support strategies vested in the cooperative sector.

#### ***4.2.1.3 Cooperative Structure and Governance***

A cooperative management board comprising 11 members was put in place. The cooperative had various sub committees, including loan, education, account, production, to look after related affairs within the cooperative. Since both the scale of activities and transaction were small, the board was not very active and functional. There was a regular saving collection and mobilization meeting once a month which was attended by all the members and board members thereby practically serving as a plenum or general assembly. Besides saving collection and mobilization other cooperative related affairs and issues were also discussed in this meeting. This cooperative did not own any fixed property or assets. The cooperative did not have its own office building and was operating by sharing the space in a building owned by a local women's group.

#### ***4.2.1.4 Cooperative Activities and Services Provided to the Members***

The cooperative assisted its members in their farming profession by helping them in accessing credit, inputs and farming technology. Saving and credit was the main activity or service of the cooperative being provided to the members. It was compulsory for the members to participate in the saving scheme. In this regular saving scheme members deposited NRS<sup>6</sup> 500.0 per month. The saving was mobilized in lending to the needy members without collateral. Soft loans of up to NRS 50,000.0 per member were provided without collateral. The cooperative sometimes also managed to provide some material support such as irrigation pipes, plastic sheeting for plastic tunnels through the DADO. Likewise, the cooperative occasionally managed to supply subsidized fertilizers to its members after receiving its quota from the government. Similarly, sometimes the cooperative would purchase bulk supplies of vegetable seeds. The cooperative also helped in technical capacity building of the members through their participation in various farmer trainings conducted by DADO and other service providing government and non-government agencies.

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<sup>6</sup> NRS is an abbreviated form of Nepalese currency called 'Rupees'. In 2012 Oct. 1 USD= NRS 88.0 (approx.)

## **4.2.2 Process and Mechanism of Building of Social Capital**

### ***4.2.2.1 Triggers of Social Capital building***

#### **Initiatives by Local Farmer Leader**

Most of the participants lauded the initiative taken by the chairman of the cooperative, first for the formation of FG and then the cooperative. He was the first to start commercial vegetable farming in the locality. In the course of vegetable farming he came into contact with the DADO and NGOs working in agriculture and started receiving various technical, material and training support from these agencies. His initial success and the supports that he received from support agencies boosted his confidence in commercial vegetable farming. Gradually, other local farmers also became attracted towards commercial farming, inspired by what he had demonstrated. As the number of commercial vegetable growers grew, a need of organizing themselves in FG was felt because to receive any supports from service providing agencies, such as DADO, they would be asked to approach through an FG or cooperative. He then led the process of forming an FG after he persuaded the fellow farmers about the need of the FG.

*“In the beginning we didn’t practice vegetable farming. We were facing water scarcity (for irrigation). Then (Chairman’s name) proposed to form a farmer group. We agreed as we had seen him doing vegetable farming on a leased plot as a migrant (to this place) from a distant village (name of the village)”. (P 1-3)*

### ***4.2.2.2 Drivers of Social Capital Building***

#### **i) Potential of Market-oriented Vegetable Production**

Participants said that at the time of the formation of the FG the demand for the fresh vegetables was growing in the Baglung town like elsewhere in the country but the local production in the municipality and nearby villages was inadequate to meet the local demand. Vegetables were entering Baglung town from distant markets to meet the demand. The major volume of local production was consumed in the local township. Generally there were no market problems. Farmers would generally sell vegetables to local retailers in the town area. Farm gate selling was also in practice. This enormous market potential apparently prompted the local farmers to be organized first in the FG and later in the cooperative in order to exploit this opportunity, as the chairman opined: “... this area despite being very close to the



*Baglung town and having not much problems of irrigation was lagging behind in commercial vegetable farming compared to other places, which were well ahead in commercial farming despite having less conducive environment than this place.”*

#### ii) Accessing Extension and Other Supports

Accessing extension support and other various government facilities also seemed to be another important driver of social capital building. Participants said when they approached support agencies such as DADO, they would be advised to form FG or cooperative to receive any services and facilities to be provided from DADO.

*“These days, wherever we go seeking government support they ask us first to approach them through a cooperative or farmer group to get the support. We thought since we had to continue our farming business we needed to be organized in the cooperative” (P1- 11)*

Likewise, participants said launching of a massive campaign by the government called ‘*Gaugau ma sahakari, gharghar ma bhakari*’ (Cooperatives in every village for household prosperity) also promoted the formation of the cooperative.

#### iii) Access to Credit Facility

For the overwhelming portion of the participants potential access to ‘saving and credit’ facilities was the main motivation or driver of joining the cooperative. Under this scheme the prospective members would need to deposit a fixed amount of money in the cooperative per month which would be then utilized among the members to satisfy their financial need of the farm and family.

*“In a cooperative...if one becomes a member in the cooperative he/she will be able to access a soft loan. Repayment is also easy: we don’t need to make repayment of whole amount at a time, we can repay our loan whenever we have money in our hand.” (P1- 1)*

#### iv) Migration

Participants said the majority of members of the cooperatives had migrated from distant villages due to poverty or destitution and hence were looking for better opportunities to make their living. They said although they were not familiar with each other and with local villagers, in the beginning, their desperation and a compulsion to feed their families brought them together to create the FG and transform it into the cooperative.

*“Most of us (cooperative members) migrated from distant villages in desperation.*

*So, we were committed to work hard for a better living.” (P 1-11)*

#### v) Anticipated Collective Power of Group

Participants said individual farmers could do little to deal with various farming and marketing issues so they needed to form a cooperative. They appeared to believe that they could accomplish anything that was too difficult for an individual, through the means of group or cooperative. They also opined that a cooperative runs from the collective efforts of all members. Highlighting the importance of cooperative one participant (P1- 12) said: *“It is better for us if we are large in number and organized in group. It will be easy for us to do anything if we join a group or cooperative.”*

#### vi) Learning about Farm Technologies

A fraction of participants mentioned that meeting learning needs was one of the motivations for them to join the cooperative because they could learn about various aspects of farming from other fellow members. One participant said he would start his own agri. business after learning related technologies.

*“After learning various farming practices as a member in the cooperative I can start working in agriculture, to run a farm in partnership with other fellow members, after I quit the present job in government service. Agriculture will be my support in my old age.” (P1- 6)*

#### vii) Other anticipated benefits

Some participants mentioned that they joined the cooperative to access any potential benefits accrued to the members of cooperatives. Such participants said they were inspired by seeing fellow villagers getting various benefits from the cooperative.

*“Seeing other people joining the cooperative and getting benefits from it I thought it was good to join the cooperative.... I thought I would be in comfort if I joined the cooperative.” (P1-8)*

#### viii) Following Others

There were quite a few participants who said they entered the cooperative following in the footsteps of their colleagues and relatives. Most such participants said they did not explore the pros and cons of joining the cooperative. One of such participants (P1-15) followed the advice of her relative:

*“There was one of my close relatives who insisted I join the cooperative. I got convinced and I just followed his directions and became a member. I did things he suggested me to do.”*

#### ix) Supply of Farm Inputs

It was found that for a small number of participants an expectation of potential ease in obtaining farm inputs, especially fertilizers and seeds, was one of motives of being a member in the cooperative.

### **4.2.2.3 Mechanism of Social Capital Building**

#### i) Cooperative Meeting

Most of the participants mentioned the monthly cooperative meeting, held on the 5th of every month, as the main forum for the networking and interaction. Although the main objective of such meetings was collection and mobilization of the regular savings from the members, the meeting also discussed cooperative related affairs. For example, it could evaluate the completed tasks and plan and discuss the future course of action; decide on who would participate in extension activities such as training, demonstration and farmers' tours as per the quota given to the cooperative by the DADO; and take decisions on distributing extension kits or material farmer field supports provided by the DADO. Besides, in the sideline to the monthly meeting, members would also engage with fellow members and discuss matters related to farming, household, and community affairs.

*“We have a monthly meeting on the fifth day of the month. We collect monthly savings from the members on that day. We discuss matters related to cooperative functioning*

*and upcoming programs. We also chat with colleagues about household and other matters”(P1-2)*

*Ad hoc* cooperative meetings were also held as and when necessary. General members were invited to discuss any issue or to take any urgent decisions about cooperative affairs if something happened in the cooperative, or if there were any new developments.

#### ii) Participation in Demonstration Farm

Participants mentioned their participation in various crop production activities in cooperative managed demonstration plot was another networking forum. The cooperative had leased a plot where vegetables were grown in the winter season and rice was transplanted in summer. It was compulsory for the members to participate in the on-going production activities in the plot. While working in the plot members would exchange farming related ideas and information. They also had an opportunity to learn from the more experienced members.

#### iii) Visits from Outside

Visits to the cooperative by the technicians and officials of service providing agencies, mainly DADO, and by groups of farmers and entrepreneurs provided another forum. On such occasions, members were also called by the chairman or the management board to meet and interact with the visiting party.

#### iv) Meetings Beyond the Cooperative and during Socio-cultural Occasions

In addition to utilizing networking and interaction forums within the cooperative, members met and interacted with fellow general members and board members in various informal occasions. Members usually met fellow general members and board while strolling in the village in leisure.

*“We, ordinary members meet with the members, who are more knowledgeable than the ordinary members and with the executive committee members in between two monthly meetings and discuss with them if there are any issues in our farming or enterprises and seek their advice on how to move ahead in our farming profession.” (P1-2)*

Sometimes members also made home and farm visits to fellow members. When they visited others' farms they could find other members doing something new. They would learn from others' experiences and try to utilize knowledge and skills they observed in their own farm situation.

*“When we go to another farm we see something and try to learn from their experiences. We try to utilize what we see in the other's field. We exchange ideas and information in such occasions for the betterment of our farm business.” (P 1-9)*

Members also met each other at planting and harvesting time of vegetables and major cereal crops as they exchanged labour on such occasions. Female members especially also met with each other fetching drinking water. Besides gossiping about their day-to-day affairs they also discussed farming related matters then. Another important and frequent occasion when members met each other was social or religious occasions in the village. Fellow members were invited to attend marriage function or other social rituals and religious homage. Likewise, members met each other in the Baglung town when they went there to sell their farm produce or buy household stuffs. Participants said some of these informal forums were long established in the village but the frequency and intensity of such forums increased after the formation of cooperative in the village.

#### **4.2.2.4 Enablers of Social Capital Building**

##### **i) Leadership**

Leadership of the cooperative, mainly its chairman, seemingly played a critical role in building of social capital. In the beginning, he led the process of forming an FG. After the formation of the FG, the chairman was involved in teaching fellow farmers various aspects of vegetable farming. He also played a crucial role in tapping outside resources into the cooperative. He was able to access or mediate outside support including training opportunities and other free-of-cost material supports to the members which helped members' loyalty towards the FG and creating and strengthening bonding ties among themselves.

*“It has all become possible because of the self-less efforts of our chairman (name). He has long experiences of doing vegetable farming and other*

*agricultural enterprises..... It is out and out his role to unite the members and run the cooperative successfully..... He offers help to the needy persons any time at their door step. The cooperative is in the present state only because of him.”*  
(P1-7)

He was the founder chairman of predecessor FG and had been the chairman since the formation of the cooperative as well. Participants said besides its chairman, other members of the cooperative management board were also very active and hardworking. Board members were serving the cooperative on voluntary basis to help the cooperative move smoothly.

*“We can work up to 16-18 hours a day and help prosper the organization (the cooperative) and ourselves...It’s like... we have been voluntarily (without pay) involving in cooperative business (especially board members). We’ve been endured many hardships and have struggled along the way to help our cooperative reach in the present position...We board members have been striving for the betterment of this organization.”*(P1-16)

#### ii) Similar Socio-economic Condition

Similar socio-economic condition of members was seemingly another important enabling factor. Almost all members were engaged in farming or agri-businesses. Since they all came from the farming profession they had common problems and needs. Moreover, all the members possessed equal number of shares and had deposited equal amount of saving as well. The chairman highlighted the importance of similarity in socio-economic status of members as he said:

*“We have included members with similar economic status, similar feeling and needs... If we allow, for example, rich person or traders in the cooperative then he/she may not work for the broader interest of the other member farmers as such persons generally think of making more profits out of any ventures and they are more concerned about their own benefits. Such factors may spoil the cooperative behaviour and environment within the cooperative we are very aware of this fact and have been practicing restrained membership drive.”*

Participants also mentioned that a majority of the members had migrated to the village in search of better livelihood opportunity and hence were committed to work hard. They added

that members were hardworking and honest. They appeared to believe that all these factors played role in building and strengthening interpersonal relationship among the members and building of network with people and institutions outside the cooperative.

#### ***4.2.2.5 Manifestation of Social Capital***

##### **i) Bonding Social Capital**

###### ***a) Increased unity***

Most of the participants mentioned the good sense of unity prevailing among the members and their feeling of ownership towards the cooperative. They believed that unity or solidarity among the members had increased after they joined the cooperative. They also appeared to believe that due to the strong bond among the members within the cooperative and good performance of the cooperative members had earned regard from non-member villagers and other outsiders. The chairman also believed relationships among members had been developed like a family over the five years since the cooperative was formed. He also said there was 'we' feeling or the feeling of 'one family' among the members. He further added the cooperative had not experienced any major obstacles or disturbances from any of its 43 members since it was formed. Another participant (P1-16) described an emotional attachment among the members within the cooperative: *"We don't have any jealousy and ill intention towards other members and their achievements rather we have 'we' feeling and are emotionally attached to each other. There is good environment of mutual help and cooperative behaviour within the cooperative."*

A majority of members said there were no issues or problems regarding the functioning of the cooperative or in the cooperative leadership. They said there were no major differences or conflict among the members. Likewise, no discrimination and bias based on caste, economic situation, social status, and political beliefs were practiced within the cooperative. Similarly, no domination of any person or group was tolerated and no one could prevail over others. Revealing very good internal dynamics among the members one member (P 1 -11) even added: *"Since we started the cooperative we have not even involved in any kind of verbal spat or brawl with fellow members so far."*

A small fraction of members, however, expressed somewhat different opinions about the cooperative functioning and the role of the leadership. A few of them even criticized the

leadership for not sharing the information about the cooperative resources and services, and external supports and their distribution among the members. They also criticized the decision making process in the cooperative for not being participatory and said that the decisions were made by only two or three people. Such participants revealed they were not receiving any other services from the cooperative except utilizing saving and credit service. One participant suspected her colleagues in the cooperative might have tapped services and facilities from outside support agencies and she did not have any clues how much support was coming from DADO and other government and non-government agencies because cooperative management did not share the information on that. Another member also apprehended that other smarter members might have received supports and facilities from the cooperative but he had yet to receive any because he believed he was not an educated person hence could not access those supports.

#### *b) Network of Cooperative Members*

Some of the participants said there was a development of a network with fellow members after becoming member in the cooperative. They said the cooperative provided opportunities to its members to develop and strengthen interpersonal relationships with fellow members. Before joining the cooperative most of the members were not familiar with each other as most of them had migrated to the village from different nearby and distantly located villages.

*“I came from uphill village. In the beginning I was not familiar with this place and the people living here. Most of the people living here came from different villages... Initially, we did not know each other. Now I’m familiar with other members and management committee and we are in good relationship.”(P 1- 5)*

An overseas returned member who joined the cooperative two years ago also revealed the changes in his contacts within the village after becoming a member. He said he had become more familiar with many villagers and that his interactions with the fellow villagers had increased.

#### *c) Norms of Reciprocity*

Most of the participants perceived that cooperative attitude and behaviour among the member farmers had increased after they joined the cooperative. Members came out to help fellow members in case of emergencies, in carrying out social and cultural functions, and in any



other types of situation when member needed help whereas they said they generally would not bother much about such things beyond the cooperative family. Likewise, offering credit to the member in a financial crunch was another important instance of mutual cooperation among the members. Some other members said they had helped fellow members to meet the monthly cooperative saving quota or loan repayment. If approached, experienced members would teach various farming techniques. Also, among the members there was a practice of labour exchange traditionally called ‘*purma*’<sup>7</sup> or ‘*hudda*’<sup>8</sup>. One female member (P1-8) narrated such norms and practice of reciprocity within the cooperative: *“When anyone is in need of labour we members go to help him; I also join them. When there is a need of labour in my farming activities, others come to help me out.”* Highlighting the change in the village, the chairman also said: *“Unlike in the past, when leg pulling (jealousy and mistrust) was very common phenomenon among the farmers, now (after joining the cooperative) they rather tend to push the fellow members to help climb the steps in stairs (to help fellow members).”*

#### *d) Trust*

Most of the participants said they generally trusted fellow members and maintained trustworthiness in their relationship with them. Some of them said they generally trusted other members because rules prevailed in the cooperative and every member followed the rules. Other said they had trust because the cooperative was running well. Expressing confidence on fellow members another member (P1-15) said: *“To date, I fully trust fellow members. I feel we all are one and the same. My gut feeling is that nobody in our cooperative would cheat or deceive the cooperative or fellow members”.*

However, participants attributed the trustworthiness mainly to financial matters. They said there had been no defaulting and absconding instances in the cooperative up to that point. They added that they contributed to the saving and credit scheme because they trusted fellow members. Most of the participants also appeared to trust the chairman and members in the cooperative management board. They believed that if the trust had not prevailed among the members, a few forward and smarter board members could have embezzled the members’ savings prompting potential collapse of the cooperative. One of such participants added that the board members had exhibited trustworthiness in cooperative affairs, especially in the

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<sup>7</sup>&<sup>4</sup>In this practice, labour is contributed to accomplish planting, harvesting or other farming activities on call by a fellow member. Later, the member who receives the labour contribution from other members will reciprocate.

saving collection and mobilization and as a result the cooperative had been doing well. They also spoke about following guidance and suggestions given by the leadership.

However, a very small proportion of participants expressed some apprehensions about the trustworthiness of fellow members. One of them believed that some members might have tried to mislead other members but one had to be aware of such members. Some members appeared to link the trust only to the borrowing. They said they had less trust in some members because they were financially weak and were not able to repay loans on time.

## ii) Bridging Social Capital

Only minor change in bridging social capital related aspects was found. On the individual level, only a few participants reported to have developed networks of interpersonal relationship with the people outside the cooperative by virtue of cooperative membership. They said they met with various people beyond the cooperative in course of their farm business transactions. Some of them had developed regular business contacts for their produce. In the process of transaction with the outside people, they were known to many people which for them was a matter of pride and high self-esteem. An overseas returned participant (P1-7) who was successfully running a dairy cattle farm proudly narrated the change in his bridging contact: *"I supply milk in the Baglung bazaar (downtown Baglung) to 80 to 90 people; I'm familiar with them. Before, nobody in the Baglung bazaar would know me. Now, when I go to there, everybody says 'Oh...see... he is (name)'"*

On the organizational level as well, a relatively poor associational relationship with other cooperatives and cooperative representative bodies was reported by the participants. The cooperative was a member of District Cooperative Union (DCU), Baglung, but its relationship was found only at the formal level as not much communication and interaction between cooperatives in the union had occurred. The cooperative had not received substantial support from DCU, itself was a new institution, and apparently not very active in its service deliveries to primary cooperatives. However, according to the chairman the cooperative had maintained a good relationship with a few representative farmers' organizations. It was a member of the newly formed Agriculture Committee Network of Baglung district which has networks in 41 Village Development Committees (VDC). The network was intended to advocate farmers' common issues and strive for solutions.

### iii) Linking Social Capital

At the individual level, only a small number of members revealed a development of contacts with service providing institutions after becoming a member. One of such members (P1 – 2) said: *“Definitely my contacts with government offices have increased after I became the member. I have good relations with district agriculture office (DADO) and also with CYC (an NGO). Before that was not the case. It perhaps grows as we move forward.”* Members who had developed linking social capital after joining the cooperative said that they were in good relationship with DADO and District Livestock Services Offices (DLSO). They said their relationship with these institutions was developed in their repeated visits to these institutions seeking extension supports and when officials or technicians from such institutions visited the cooperative.

Participants also reported their increased access, by virtue of cooperative membership, to extension supports, including farmer training and technical services from DADO. Participants also revealed that the cooperative had been recognized by many government service providers and members’ access to these agencies had increased by virtue of cooperative. One of the participants (P – 1) revealed: *“Now government agencies give us due recognition. They treat us differently (more positively) when we approach them through our cooperative”*

## 4.2.3 Utilization and Impact of Social Capital

### 4.2.3.1 Utilization of Bonding Social Capital

#### i) Farm Technology and Information

Participants said members were benefiting from the knowledge and experiences of the board members and other more knowledgeable fellow members. Usually members would seek advice from such experienced members if there were any issues in any enterprises. Especially, the chairman helped the members in imparting farming related technical knowledge and skills to the fellow members.

*“Within the cooperative we can learn about (various aspects of) the farming from our senior colleagues who are well experienced and other fellow members. We teach each other as well.” (P1 – 16)*

Some participants said they also learnt from fellow members when they visited latter's farm. Most of the participants lauded the demonstration plot managed by cooperative as an open learning school for the members for learning various crop production and management techniques.

#### ii) Credit Facilities

A large number of the participants mentioned that an access to farm credit was the most important benefit of being a member in the cooperative. Member farmers could access the soft loan from the cooperative through participating in the monthly saving and credit scheme, as one member (P1 – 7) said: *“We have become able to access credit whenever we are in need from the cooperative and run our businesses successfully after becoming a member.”*

Almost all members commended the saving and credit facilities of the cooperative citing the difficulty in accessing a loan from informal sources. Borrowing from banks and other financial institutions was not easy for them also, as borrowing from these institutions would take more time and efforts compared to borrowing from their own cooperative. Moreover, such financial institutions would lend only on collateral basis and the interest rate could also be higher. But in the cooperative, they said, borrowing was like mobilizing their own money.

Although, membership and contribution to the saving fund were generally sufficient conditions to access credit, social capital came into play in borrowing. Participants said members were supported by the fellow members in accessing credit from the cooperative. A few members said they had been helped by the fellow members when they were short of money for their monthly saving deposit or monthly instalment of loan repayment. They also said recommendation by fellow members influenced the decision of granting of a loan. Moreover, the prospective borrower's track record in repayment would also be taken into consideration in making lending decision.

#### iii) Informal Labour Exchange

Members also benefited from the informal exchange of labour among themselves in their farming activities. Farmers were able to contact fellow members seeking labour support when they fell short of labour, mainly during planting and harvesting time, and to do labour intensive work. Members who received such supports reciprocated for fellow members. One of the participants (P1 – 16) narrated: *“We were four members in the group to build the*

*plastic house. We built plastic houses one after another on the basis of reciprocity. I have also reciprocated by providing my labour when they prepared the tunnels. We have prepared 60-70 plastic tunnels (in the village). We never hire people from outside.”*

Likewise, participants said they offered, and received, a helping hand to and from fellow members in organizing religious and social functions in the village.

#### iv) Community Support in Emergencies

It was observed that a member could receive help from fellow members should he or she land in any kind of emergency situation or trouble. One of the female participants(P1 – 8)narrated how she was helped out when she was in dire situation due to an accident that happened to her daughter-in-law: *“It’s like...in case of emergencies or trouble...for example in last summer my daughter-in-law broke her legs. It was not possible for me to take her to the hospital as we are bit far from the road head and she is bit heavy. Then, fellow members came to my place and brought her to and from hospital leaving aside their work in the farm in the middle of the transplanting season.”*

#### v) Farm Inputs Supply

Only a limited role of the cooperative in the provisioning of farm inputs and supplies was reported by the participants. The cooperative was not directly involved in provisioning of farm inputs and supplies on a regular basis. However, the cooperative assisted the members in availing major farm inputs such as fertilizers and seeds to them. For example, the cooperative was found occasionally administering the quota of subsidized fertilizers to its members after receiving such quota from the government authority<sup>9</sup>. Likewise, sometimes the cooperative would purchase vegetable seeds in bulk, collecting money from the members and distributing accordingly.

#### **4.2.3.2 Utilization of Bridging Social Capital**

Limited use of bridging capital was found. This corresponded to the limited growth of bridging social capital both at individual and organization levels. At individual level, a few member farmers said they had established networks with their customers in Baglung. For

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<sup>9</sup> As per the current government policy fertilizers are distributed at subsidized price through agriculture cooperatives across the country. At the district level the distribution work is coordinated by the local DADO.

example, these members reported they had fixed customers there for their produce. Some such customers ran retail shops for daily goods and often provided credit to them. However, no utilization of benefit from bridging social capital was reported on the organizational level.

#### **4.2.3.3 Utilization of Linking Social Capital**

In the majority, the participants said there had been an increase in the flow of outside supports in the village after the cooperative was established. They said they were receiving more farm supports now than before from the service providers through the cooperative by virtue of the membership. Major government institutions supporting the cooperative were DADO, DLSO and Agriculture Development Bank. DADO mainly extended farm technology related training and extension supports. Highlighting these supports of DADO one participant (P1 – 3) said: *“We’ve been receiving technical services and material supports from DADO. We usually receive various trainings, seeds/saplings for demonstration purpose, plastic sheets for plastic tunnel, pipes for irrigation etc.”*

Participants said they received services and facilities through the cooperative rather than individually and the cooperative meeting decided about how to deploy these resources.

#### **4.2.3.4 Impacts at Individual or Household Level**

##### **i) Increased Farm Income and Livelihood Improvement**

Social capital was found to have contributed in household income and living standard of the member farmers. Most of the participants said a majority of the members started vegetable farming after joining the cooperative and accessing financial and technical supports from it. Many of them even had leased the plot fellow villagers for the vegetable production. A good return from vegetable farming had improved the living condition of the members. They had been able to feed their families better and manage better education for their children. One of the members (P1 – 16) reminisced emotionally about the old days and seemed happy about his achievement: *“I had to depend on others’ mercy for a pack of rice to feed my family but now I am easily feeding my family with my own earnings. My children go to boarding school<sup>10</sup>.”*

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<sup>10</sup>A private school with English as a medium of instruction. Such schools may also provide boarding facilities for students. In Nepal, such schools are popularly called as 'boarding school'.

It had become easier for the member farmers to manage the financial needs of their farm business. Members borrowed to meet farming and household requirements through participating in the 'saving and credit' scheme. Likewise, they had developed some specific skills through participating in skill-based training offered by DADO and other service providers. Members had also been benefited from the experiences and technical expertise of the chairman and fellow members.

## ii) Empowerment

Participants perceived that they had become more capable and confident in handling farming and household related affairs, and dealing with the outside world after joining the cooperative. They would attend meetings, participate in trainings and excursion visits and deal with outsiders in course of running their farm business. Many of them believed that they had become smarter than before because of their engagements in all these affairs. Particularly, women participants said they had learned about how to talk to other people, especially strangers or people from outside. They revealed that in the past they were hesitant to speak to others, but they had become able to express their feeling and ideas confidently before a group of people.

*"I feel I have learned something after becoming the member. In the past, we used to confine ourselves within the household premises. We used to be ignorant about anything. We didn't know about how to talk to others. We used to be fully engaged in own household chores. But now, when there is a meeting we try to attend that by any means."* (P1 – 8)

Some female participants mentioned the increase in their confidence to manage their household affairs as well as to handle farming related matters on their own in the absence of their male counterpart.

## ii) Increased Feelings of Security

A few participants said their sense of security and confidence of overcoming any potential untoward incident in case it happened to them had increased than the past time. They expressed confidence in garnering help and support from fellow members in emergency situations. One female participant (P1 – 11) imagined a hypothetical situation and said: *"If I'm in any medical condition I can bank on my fellow members to get me to hospital calling*

*an ambulance. So, I have a feeling of security that if anything happens to me fellow members will rescue me. Some will call ambulance; others might manage money for hospital and so on."*

Such participants said before entering the cooperative they had felt insecure about coping with emergencies but could now rely on help from the cooperative and fellow members if they were in need or in any trouble.

### iii) Development of Positive Attitudes and Behaviour

Likewise, a small fraction of participants said they had quit the socially unwelcome habits, such as drinking alcohol and playing cards, and adopted the good ones after joining the cooperative. They added the cooperative taught them about decent behaviour in the group or society. They revealed that as a member they also looked for what others were doing and became cautious not to indulge in any unacceptable actions in the fear of potential loss of earned goodwill. Moreover, there had been a development of positive attitude among the members about the importance of hard work for successful farming endeavour.

### **4.2.3.5 Impact at Community Level**

#### i) Increasing Trend of Vegetable Farming

Participants said the number of member and non-member villagers involving in vegetable farming had increased remarkably after the formation of the cooperative so had the area under vegetables. Some members who only grew a few traditional vegetables in their backyard for home consumption had started commercial vegetable farming following membership. Others who were already farming vegetables commercially in small areas have now expanded after joining the cooperative. Another category of members who did not have sufficient land and had to do paddy share cropping to feed their family had also started commercial vegetable farming by leasing the land.

#### ii) Retaining Youths in the Village

Participants said among the members there were at least six who came back home on short leave from overseas jobs but never went back as they had been attracted by the economic progress fellow villagers derived from vegetable farming and joining the cooperative. They finally joined the cooperative and started vegetable farming.



### iii) Community Cohesiveness, Helping Attitude and Harmony

Some participants also revealed that there was a positive impact on community cohesiveness and harmony after the cooperative was established in the village. Within the cooperative there were no discriminatory practices based on social and economic status, caste, religion, gender among the members. Participants said such positive attitudes and practices were radiated in the village beyond the cooperative. Moreover, they also spoke of an increasing trend of member and non-member villagers taking part in and helping out fellow villagers in organizing socio-cultural functions and other rituals.

#### ***4.1.3.6 Impact on Cooperative Performance***

Most of the participants cited group bonding social capital expressed in terms of good unity within the cooperative as a main reason for the success of the cooperative. Likewise, they believed that linking social capital also supported to the improved cooperative performance and success. As perceived by the participants such unity or group bonding social capital and linking social capital were found to have been expressed in following ways.

#### i) Impact of bonding social capital

##### *a) Commitment of Chairman and Board Members*

An overwhelming number of participants mentioned the critical role of the chairman in the success of the cooperative. The chairman had been striving for the betterment of the cooperative leaving aside his household affairs and jobs. He was technically sound in farming related techniques especially in vegetable farming. He was easily approachable by the fellow members seeking his suggestions about farming related problems and technical matters. Participants opined that it was because of the critical role played by the chairman the cooperative was making progress.

*“It has all become possible because of the self-less efforts of our chairman (name). He has long experiences of doing vegetable farming and other agricultural enterprises. He has now become JTA<sup>11</sup> as well. It is out and out his role to unite the members and run the cooperative successfully... He offers help to the needy persons at their door step no matter what support is needed*

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<sup>11</sup> Abbreviated form of Junior Technical Assistant, a mid-level agricultural technician

*at what time and place. The cooperative is in the present state only because of him.” (P 1-7)*

The majority of participants also mentioned that the cooperative management board was active and served another reason for the existing performance of the cooperatives. Besides the chairman, members in the cooperative management board were dedicated and very active in cooperative affairs which had also encouraged other general members to be active.

*b) Voluntary Service of Board Members*

Some participants said the voluntary service of some members of the board had also played a crucial role in the cooperative success. They were providing to the cooperative voluntarily and non-paid services. They were supporting the chairman to guide the cooperative as per his vision and plans.

*c) Members Taking Interest in Cooperative Affairs*

Most of the participants believed that the majority of the general members were active and hardworking. Like the board members, general members were also actively taking part in cooperative affairs. They said the active board has also made them as well active. One participant (P 1-8) said: *“We are committed for the progress of our cooperative if our cooperative makes progresses then there will be our progress too.”* Participants also said members followed and obeyed the leadership call when it came to cooperative affairs.

*d) Honesty*

Some participants believed honesty of members also contributed in cooperative success. The cooperative did not have any instances of members defaulting and running away. One participant (P 1-11) narrated: *“There is a feeling and determination of the members not to run away defaulting or embezzling the cooperative money.”*

*e) Good Governance*

Most of the participants said the cooperative management board was running as per the democratic norms and values by adopting a participatory approach in cooperative functioning. The board consulted members and received their consent before embarking in any new ventures, as the vice chairman of the cooperative said: *“We don’t do anything*

*without consultation with the fellow members. We embark on anything only after the cooperative meeting gives it a nod.”*

The overall functioning of the board was found transparent. Decisions were made through the meeting following thorough discussion. In lending as well decisions were taken on the meeting day itself. The loan subcommittee recommended loan approval based on the needs and urgency of the applicants. Financial transparency was reported as a critical factor for the success of the cooperative. The cooperative had adopted and met the standard of prevailing book keeping practice with transparent income and expenditure streams.

Moreover, the board was found to be distributing material and non-material supports provided by outside service providing agencies in fair and equitable manner among the members. No practice of nepotism and favouritism appeared in the distribution of services and facilities within the cooperative.

#### ii) Impact of Linking Social Capital

Various supports from external GOs and NGOs had also played a crucial role in the successful endeavors of the cooperative. Local DADO and other NGOs had provided extension and other logistic supports since the beginning of the cooperative. They had also supported in the institutional capacity building of the cooperative by providing training and guidance in financial management and management of other cooperative affairs.

However, a few participants criticized the leadership for not sharing the information about the cooperative resources, services and facilities received from outside and their distribution of among the members. One participant suspected his colleagues in the cooperative might have tapped services and facilities from outside support agencies and she did not have any clues how much support was coming from DADO, DLSO and other agencies because cooperative management did not share the information on that. Another member also suspected other smarter members in the cooperative might have received supports and facilities from it but he had not because he was not educated.

#### iii) Motivation for Maintaining Social Capital

##### *a) Continued Livelihood Supports*

Predominantly, the participant said members were satisfied and happy with the services and

facilities being provided by the cooperative and that with the performance of the cooperative. They said members were committed to maintain loyalty towards the cooperative in order to continuously receive supports from the cooperatives and fellow members as one participant (P 1-8) said: *“We are committed for the progress of our cooperative if our cooperative makes progresses then there will be our progress too.”*

It was shown that the cooperative management board strove to get the needed supports to the members by approaching various outside support agencies. One of the board members (P 1-16) said: *“We always strive for fulfilling whatever needs any members might have, approaching outside support agencies.”*

#### *b) Selfless Attitude of the Leader*

The chairman's selfless attitude apparently motivated him to strive for the betterment of the cooperative. Participants lauded his selfless and helping attitude and behaviours. The chairman himself chose to attribute his altruistic behaviour as his personal choice, or belief, as he said: *“You see nowadays people everywhere lying and cheating others. I don't believe on that and I don't like such things. To me earning trust of others is very important things, again it's about your personal choice or belief. I can't enjoy lying to others”*

#### *c) Fear of Sanction*

Fear of informal social sanction also seemingly prompted the chairman to strive for the cooperative and act and behave in an honest, trustworthy manner.

*“If I lie to others or fail to keep my promise I will lose the trust of people around me and that will be quite painful for the people like me...I can't get anything putting my credibility at risk.”(Chairman)*

This section has presented a general description of Mirmire Cooperative, process and mechanism of social capital building, and utilization and impact of social capital. It has shown a critical role of farmer leader in building and utilizing social capital, and for various impacts observed at individual members as well as community levels. It has also shown that monthly cooperative meeting was the main mechanism of social capital building.

### **4.3 Jana Kalyan Agricultural Cooperative Ltd, Pitlek, Syanja**

#### **4.3.1 General Description**

Jana Kalyan Agricultural Cooperative Ltd. was one of the two cooperatives selected for the study from the Syanja district. This cooperative represented the case of relatively large cooperative located in place with medium accessibility. The cooperative was established in 2006. Although the whole Jagat Bhanjyang Village Development Committee (VDC) came under the commanding area of the cooperative, mainly the members were from Ward number 2, 3 and 1 of the VDC. Membership was mainly drawn from local farmers, a majority of whom were engaged in vegetable farming, with some at semi-commercial to commercial scale. The cooperative headquarters was located in Jagat Bhanjyang-2, Pitlek at one and a half hours walk from the road head. Irregular services of a small four-wheeler joined the village to the highway in winter.

The total number of members was 142 (88 male and 54 female) in October 2012. A majority of the cooperative members were smallholder farmers. Land holding size ranged from 0.1 to 1.25 hectare with majority of members owning 0.25 to 0.3 hectare of land. The major portion of the arable land was upland field. Majority of the members belonged to *Brahmin*, *Chhetri*, *Sanyasi* and *Janajati*<sup>12</sup> according to the prevailing social caste system of Nepal.

##### ***4.3.1.1 Pitlek as a Popular Vegetable Production Pocket***

Jagat Bhanjyang is one of sixty VDCs of Syanja districts. Pitlek is one of the several villages of the VDC. The Pitlek village has a typical hilly terrain. Most of the village is rain-fed upland. The village had been suffering from water scarcity until 2006 when drinking and irrigation water was made available in the village, thanks to the solar power driven lifting irrigation system developed in the village with external support as well as internal contributions. More farmers then become able to engage in vegetable farming and raise their family income.

The village was famous for producing good quality tomatoes. The traders and consumers alike from distant markets preferred the tomatoes produced in the village. There was a

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<sup>12</sup>The term '*Janajati*' is used to denote several social groups under indigenous nationalities in Nepal.

distinct identity of tomatoes produced in the village, popularly known as ‘Pitlek tomatoes’. Around 40 member farmers were engaged in market-oriented vegetable farming.

Mostly members would sell vegetables through the collection centre managed by Triyasi Cooperative located in Triyasi town on the highway. They would transport vegetables up to the collection centre carried on their backs in traditional bamboo sack locally called *Doko*, in the summer season. In winter, they would personally carry the vegetables up to some point in the village and from that point would be transported in the hired jeep. After reaching the collection centre, the vegetables collected at this cooperative formed a part of bigger volume of vegetables collected from Triyasi and its catchment.

#### ***4.3.1.2 Historical Development the Cooperative***

Before the formation of the cooperative, an FG was established to promote vegetable farming with the help of nearby Agriculture Service Centre (ASC) of DADO, Syangja, in 1989. The FG comprised of 17 members but did not run very actively. Even before that, a handful of villagers introduced commercial vegetable farming in 1983/84. Because of suitable micro-climate and hardworking farmers the village gradually became known as a pocket for fresh vegetable production, but faced the problems of poor irrigation and village roads. Moreover, with the increased level of production, the use of pesticides was also on the rise. A few leader farmers were in search of alternatives to the massive pesticide use as, by that time, they knew that excessive use of pesticides was hazardous for human health and the environment. Also, vegetable traders and consumers had started complaining about the high dose of pesticides used in the vegetables produced in the village.

In 2004, there was one Integrated Pest Management (IPM) Farmers Field School (FFS) running in the downstream area. The FG was invited to attend a field day of the FFS. The members representing the FG became impressed with the concept of IPM and FFS. These members met with the chief of DADO, who was also present in that particular occasion, and requested him to run one such field school in their village as well. In fact, the DADO people were also contemplating certain actions needed in Pitlek to help reduce the extensive use of pesticide. The chief promised to allocate funds and other necessary support to run the FFS in the village. Following this, a season-long IPM FFS in tomato was carried out in a later season after forming an IPM farmer group with 32 members in the technical and financial support of the DADO. The main objective of the IPM FFS was to reduce the level of pesticide use and

expand vegetable farming in the village. Once the IPM FFS was started, the DADO's activities and monitoring visits to the village increased which helped them to learn more about the problems that farmers were facing. On the other hand, farmers had opportunities to share agriculture related problems with them.

The main problem the village was facing at that time was scarcity of water for irrigation, and sometimes even for drinking. The situation was so dire in dry season that villagers had to walk for two hours to fetch water. There was one source of water down in the village which could be utilized both for drinking and irrigation. After learning about water scarcity in the village in one of his visits to the village, the then chief of DADO proposed to offer some sixty to seventy thousand rupees under the 'small irrigation scheme' to be funded by DADO. However, the money was completely insufficient for the proposed irrigation project. He gave the villagers an idea of forming a cooperative which would make them eligible to access another scheme called 'cooperative irrigation' in the DADO, under which a successful proposal for irrigation could get up to three hundred thousand rupees. The group was also mulling over transforming the FG to a cooperative in order to expand vegetable production and adopt collective marketing. Then the FG meeting decided to form the cooperative and eventually a cooperative named Janakalyan Agriculture Cooperative Ltd. with 28 founder members was registered in the Division Cooperative Office, Kaski Pokhara, in October 2006.

After the cooperative was formed, a funding proposal was submitted the DADO seeking funds for the proposed irrigation- cum -drinking water scheme. The proposal was successful and the cooperative received three hundred thousand rupees. The cooperative started the project with that money but the money was only a small fraction of the estimated project cost. The cooperative managed to shortfall by approaching other related government agencies and local bodies. The rest of the money was contributed by the local VDC, Regional Agriculture Directorate (RAD), Pokhara, a regional wing of Department of Agriculture (DOA) and Ministry of Agriculture Development (MOAD).

With the water facility better for drinking and for irrigation, household income of the villagers increased through vegetable farming. After the completion of the project Pitlek village turned out to be the destination for outsiders to observe vegetable farming and the solar power based lifting irrigation scheme in the village. Among the outsiders were higher officials of MOAD and RAD as well. They recognized the village as having good potential for vegetable production and afterward funded other projects.

The cooperative was awarded as the best cooperative in the previous year in the Syanja district for cooperative governance, and outstanding performance in service delivery to the members. All the growth in vegetable production and marketing had become possible following the formation of the cooperative leading to the building and revamping of existing social capital within the farming community in the village.

#### ***4.3.1.3 Cooperative Structure and Governance***

A functioning 11-member management board was in place. Service of an accountant -cum - manager who primarily looked after the saving and credit program of the cooperative was also available. The cooperative office did not open on daily basis; rather it opened on the monthly meeting day of 25<sup>th</sup> of every month. The meeting was mainly devoted to saving collection and lending purposes.

There was an advisory committee of the senior and experienced members. The role of the committee was to act as a watchdog for cooperative functioning and provide advice and feedback to the cooperative management board in cooperative affairs. The cooperative management board generally sat on bi-monthly basis but sometimes more, often depending upon the issues and agenda to be discussed and decided. Agendas from the regular monthly meeting would be brought to the board meeting. The General Assembly (GA) was held once a year to discuss and ratify the cooperative progress and future plans. It discussed achievements made in the previous year by the cooperative and the plan for the next year. Any issues within the cooperative were discussed and resolved through the GA.

#### ***4.3.1.4 Cooperative Activities and Services Provided to the Members***

The cooperative helped members in various aspects of farming. The main activity of the cooperative involved saving collection from the members, and its mobilization as lending to the members. Saving collection and mobilization was carried out in each monthly cooperative meeting. The cooperative also administered one 'micro-finance' scheme powered by the Agriculture Development Bank of Nepal. Under this scheme the Bank would provide the lending to such cooperatives at low interest rate. Cooperatives then would lend to their members at higher interest rate after adding their operational cost.

The cooperative had its own building mainly used as office space and godown. It also maintained a glasshouse where it demonstrated and raised a vegetable nursery. The



cooperative also ran the cooperative shop, from which the cooperative supplied daily goods and agricultural inputs to the villagers at relatively cheap price. In the main crop season the cooperative sold various seeds, subsidized fertilizers and pesticides from the shop. Besides, the cooperative also maintained some pesticide sprayers, which members could access to spray pesticides in the standing crops. Likewise, the cooperative administered the government's crop and livestock insurance program.

The cooperative was not directly involved in marketing the farm produces for the member farmers. It had however developed an understanding with Triyasi Cooperative to accept vegetables produced by its members at the collection centre managed by that cooperative. The cooperative sometimes managed vehicular arrangement to transport vegetables to the collection centre. Likewise, by 2012, the cooperative started an organic coffee production project under 'One Village One Product' (OVOP), a joint Government of Nepal (GON) and Federation of Nepalese Chamber of Commerce and Industries (FNCCI) program. Similarly, there was an ongoing gravity ropeway project funded by a project called 'Project on Agriculture Commercialization and Trade' (PACT) under the MOAD to facilitate the transportation of vegetables and other farm produce down to the highway to the Triyasi collection centre. The cooperative had a plan to promote agro-tourism in the village as well.

Besides these, the cooperative helped update knowledge and skills in farming and marketing through organizing farmers' training and tours or visits, in coordination with DADO. Sometimes, higher officials would visit the cooperative and members' farms and provide technical advice to the farmers about better crop and pest management.

#### **4.3.2 Process and Mechanisms of Social Capital Building**

##### ***4.3.2.1 Triggers of Social Capital Building***

###### **Launching of IPM FFS**

Extension intervention from local DADO in the form of launching an FFS in the village to introduce IPM technologies in vegetables apparently triggered the building of social capital in Pitlek village. Running of FFS required local farmers to participate weekly in a school designed for discovery based learning on IPM technology. Participants said during the FFS participating members had an opportunity to interact with fellow farmers about various aspects of farming as well as household affairs which arguably laid foundation for building of

social capital. Moreover, as the FFS visits of DADO officials and other senior officials increased so did the farmers' interaction with them, which paved the way for building of linking social capital.

*“Once we started the FFS, DADO’s activities and monitoring visits increased in the village which helped them to learn more about the problems that farmers were facing. We also had the similar opportunity to tell them our problems because it was not possible for the individual farmers to visit the DADO and put their problems... So, IPM FFS served the initial triggers (for the present success of the cooperative).”*  
(P 2- 11)

The running of an FFS also provided a foundation for the formation of the cooperative and further development of social capital by providing a platform for interaction between, and among, the various stakeholders.

#### **4.3.2.2 Drivers of Social Capital Building**

##### **i) Market-oriented Vegetables Production and Selling**

Exploiting economic potentials in terms of market oriented vegetable production appeared to have played a crucial role in cooperative formation and resultant social capital building and reinforcement. Because of suitable micro-climate the village had been developed as a fresh vegetable production pocket. Tomatoes produced in this village were famous for good taste and keeping quality in local as well as distant markets. This economic seemed to have encouraged the local farmers to join hands together to form a cooperative to benefit from collective action among them. Locals had realized this potential as one participant (P2-6) mentioned: *“Our village is well known as the vegetable pocket. Many people have started vegetable farming in here quitting good job they were doing.”*

##### **ii) Accessing Extension and other Supports**

Accessing extension or other government support to be channelled into the farming community was found to have served as the main motivation for most of the participants. Participants were found quite knowledgeable about this government policy. One of the participants (P2-4) narrated: *“Members can get various services and facilities available in the cooperative which we can’t get if we are outside (the cooperative). So, I became member.”*

### iii) Accessing Government Funding Supports for Community based Schemes

Some participants mentioned that negotiating funds for bigger projects with government agencies, mainly DADO was not possible through the FG so they wanted to convert the FG into the cooperative. The local villagers decided to register the cooperative in order to be able to access government funding support for the proposed solar power driven lifting irrigation scheme in the village. As per government extension policy only agricultural cooperatives were eligible to apply for the funding to be provided under the 'cooperative irrigation' scheme of DADO.

*"Legal and functional limitation of the FG (only cooperative can apply for some of the government supports), we had to go for forming a cooperative for negotiating that lifting irrigation scheme. We were then able to get funds for that project." (P2-15)*

### iv) Perceived Potential Benefits

Perceived potential benefits of joining the cooperative seemed to have encouraged the local farmers to join the cooperative. Participants mentioned that they joined the cooperative in the expectation of potential material and non-material gain. They did not have specific knowledge and ideas about what support could be available though.

*"Also, members can get various services and facilities available in the coop. which we can't get if we are outside (the cooperative). So, I became member in the hope of benefits available for the members." (P 2-4)*

### v) Collective Power of Group

Another motivation for the local farmers to form and join the cooperative was the potential collective power of the cooperative as the organized group of farmers. One participant (P 2-5) highlighted the importance of joining the group or cooperative: *"In today's world individual person cannot do much. These days everything is accomplished through group or cooperative. So, I found appropriate to become the member in the cooperative."*

### vi) Saving and Credit

For the majority of the participants, saving and credit was another motivation for the local growers to join the cooperative. One of the participants (P2-5) highlighted the benefits of

joining the cooperative in terms of accessing saving and credit program: *“I can deposit my household saving in the cooperative which I can withdraw later when I’m in need. I can also get a loan from the cooperative at cheaper interest.”*

#### vii) Learning Farm Technologies

A small fraction of participants said one of the reasons they joined the cooperative was the potential for learning opportunities about the vegetable farming. They said they could learn of various farm technologies through farmer training schemes and tours, in coordination with various GO and NGO service providers, especially with DADO.

#### viii) Following Others

There were a few participants who said they joined the cooperative following the advice of their relatives and friends. One of such participants (P2-2) said: *“I’m not that educated person. All other people asked me to join the coop. saying that it would be beneficial if I joined the cooperative, so I joined the cooperative.”*

### **4.3.2.3 Mechanism of Social Capital Building**

#### i) Cooperative Meeting

Most of the participants mentioned the monthly meeting to be the main regular forum for their interaction with fellow members. The meeting was mainly devoted to saving collection and lending purposes. They also discussed the various cooperative affairs, like ways and means to improve its performance. Participants said when they met fellow members in monthly meetings they also shared their experiences and ideas about farming related and other personal and family matters. They also exchanged information on dealing with particular issues in farming.

Highlighting the importance of the regular monthly meeting one participant (P2-3) said: *“I have found that after becoming a member of the cooperative it is easier to mingle with fellow members as we meet each other in the cooperative meeting. We come closer to each other when we start sharing our personal feelings and ordeals.”*

In between monthly meetings, *ad hoc* meetings were as held as and when necessary to discuss urgent cooperative affairs. Meetings also held discussions on cooperative affairs and issues with the visiting support agencies or other parties and people. In such meetings

participating members would also engage in interaction with fellow members and other parties which could result in building of networks, trust and norms of reciprocity between the interacting parties.

#### ii) Informal Meeting and Interaction

Besides various meetings, participants also mentioned a number of informal forums and occasions when members met each other and with other actors related to cooperative affairs. Members were found usually visiting the cooperative with any issues or concern and discussing such issues with chairman and other members of the cooperative management board and asking them to take necessary decisions or action. Members were also found to meet each other when any problems with insect pests occurred in the standing crop of any member. They would discuss the causes of the problems and try and solve them. A practice of exchange of farm visits among fellow members was also reported. Members shared their experiences and ideas with each other in such visits.

*“We often have interaction about doing better in our farming. We often exchange visit each other’s farm and learn from each other’s experiences and also offer suggestions to each other.” (P2-10)*

#### **4.3.2.4 Enabling Factors**

##### i) Support of Service Providing Agencies

A large proportion of the participants said that the support of government and non-government agencies had been critical in the evolution of the cooperative. Members particularly lauded the role of the DADO officials and technicians who managed to run a season-long IPM FFS for the vegetable growers in the village. The DADO later facilitated the transformation and ultimate registration of then FG into the cooperative. Likewise, RAD, Pokhara, also supported the cooperative variously. It had helped the cooperative in tapping resources from other government and non-government agencies to complete the village drinking water –cum- irrigation scheme. Two other agencies which had also supported the cooperative were local VDC and MOAD.

#### ii) Hardworking Leadership

A few local farmer leaders were found to have played an important role in transformation of the FG to cooperative, which helped in building additional social capital by providing more opportunities for network and interaction. Most of the participants lauded the crucial role of the chairman of the cooperative, and a couple of other active farmers, in approaching external donors and support agencies in a bid to tap various supports and facilities from such agencies. Besides, they led the process of making farmer villagers come together to form a cooperative and strive for the betterment of farmers themselves and the village as a whole.

#### iii) Similar Socio-economic Condition

Shared farming profession and similar socio-economic conditions of members had also apparently contributed to the building and reinforcement of social capital. The cooperative leadership and members were determined not to include people from other main professions than farming as they believed their objectives did not match with people from other professions. Highlighting the cooperative as truly the farmers' cooperative the secretary said: *"...Each member is maintaining vegetable farming at least at kitchen garden scale. We all are farmers, nobody among us is a politician or merchant. ... So, our cooperative is an organization of like-minded farmers with similar status (socio-economic). No farmer can go against the interest of the farming community and neither can he do any harm to their fraternity."*

#### iv) Pre-existing Social capital

Limited pre-existing social capital of a few villagers appeared to have contributed in the further development of social capital in the community. Bonding social capital was arguably built when an FG was established in 1989 with the objective of promoting commercial vegetable farming in the village initiated by a local extension agent. This contributed to the formation of the cooperative and subsequent building of social capital.

#### **4.3.2.5 Manifestation of Social Capital**

##### **i) Bonding Social Capital**

###### *a) Increased unity*

An overwhelming number of participants mentioned the positive change in group bonding social capital among the members and executives of the cooperative. They said the change was mainly in terms of high group solidarity or unity among the members and a general absence of internal conflict or division within the cooperative. Moreover, general absence of negativity among members was reported as participants said no one possessed any ill intention of suppressing and sabotaging others. Participants also said there was no domination and exploitation by any group of people who were well off or might have political or cultural influence. One participant added that if anyone tried to dominate others or show arrogance then that would affect the health of the cooperative and could eventually lead to its collapse. So, members were aware of this fact and had not been involved in any such activities.

###### *b) Network of cooperative members*

Some participants mentioned that it had become easier for them to mingle with fellow members and develop networks with them after they joined the cooperative. Members would meet each other in cooperative meetings and on many other occasions or in forums provided by the cooperative. Highlighting the benefit of membership, one member (P 2-4) said: *“I was like blind and dumb in the past as I didn’t go anywhere or mingle with other people. Had I come out of the home, met with others and tried to understand things I would have been more knowledgeable and smarter.”*

###### *c) Norms of reciprocity*

Participants largely reported bearing a helping attitude towards fellow members. Members came forward to help out any members in trouble or need of any kind of assistance or in farming related matters.

*“We members bear the helping attitude. For example, if I raised 500 seedlings of vegetable to transplant and someone lost the seedlings due to some reasons, I wouldn’t think of transplanting all the seedlings rather I would support the fellow*

*members supplying some of the seedlings. If I think so others also do the same. Nobody would think only he should get benefit of opportunities.” (P 2-6)*

Most of them thought that they would be in a better position helping fellow members in their vegetable farming related matters because they thought by doing so they could enhance their collective bargain.

#### *d) Trust*

Most of the participants said inside the cooperative members generally trusted the fellow members. Trusting relationships between members and the cooperative management board were also reported. The board seemed to have earned the trust of the members mainly through providing various services and facilities to the members and through the maintaining good governance in cooperative affairs. Participants said it was because of the trust in the cooperative management board they supported the board in its endeavours. Another participant expressed trust and loyalty towards the board by saying that the decisions in the cooperative were implemented by all the members and members also followed the rules and the code of conduct of the cooperative.

The leadership also demonstrated awareness of the importance of trust within the cooperative. They said the members had entrusted them to run the cooperative and that they should respect the trust members vested in them. The chairman mentioned the members’ trust in the leadership by saying: *“The members have given the responsibility of driving this institution to the board. We board members respect their trust on us and will always try our best to meet their expectation.”*

#### *ii) Bridging Social Capital*

Only a small fraction of participants said there was any development of bridging social capital in the form of their relationship with local as well as distant market based traders. Members only developed this social capital in the course of finding buyers for their own produce. No direct role of the cooperative in building bridging social capital at the personal level could be found.

At the organizational level, nevertheless, it was learnt that the cooperative had developed bridging network with other agricultural cooperatives operating in nearby villages.



Especially, it had maintained good relationship with Triyasi Agriculture Cooperatives located nearby. However, most of the participants said relationship of Janakalyan Cooperative with higher level representative cooperative bodies was poor as no practical relationship was reported or observed in terms of the cooperative, receiving any kind of supports from district unions.

### iii) Linking Social Capital

Some participants said they had developed linking social capital at the individual level by virtue of the cooperative membership. In course of running IPM FFS there were frequent visits of Agriculture technicians and officials from local ASC and DADO, Syanja, which helped to build linking social capital of the members. Likewise, in the process of cooperative registration, and in the post registration phase seeking forms of government support they had to make several rounds of visits to the external service providing government and non-government agencies. Repeated visits to such agencies and interaction with the concerned authorities helped build linkage with these agencies. Moreover, members of the cooperative management board and other general farmers often had a number of opportunities to meet, and interact with, many senior government officers, as well as politicians, in course of various cooperatives affairs.

The majority of the participants also said the cooperative possessed a good stock of linking social capital at the organizational level. Participants said the cooperative had maintained a good relationship with the government agencies like DADO, Syanja, RAD, MOAD, and local District Development Committee (DDC) and VDC. It had been able to tap various resources from these agencies into the cooperative one participant said that board members had worked hard approaching donors or support agencies and establishing contacts with them, and negotiating supports for the cooperative. The chairman himself revealed development of linking social capital with service providing agencies. In his capacity as chairman, he had himself visited many government agencies in the course of negotiating funding for the various projects put forward by the cooperative.

### 4.3.3 Utilization and Impact of Social Capital

#### 4.3.3.1 Utilization of Bonding Social Capital

##### i) Farm technologies and information

Participants said member farmers learned from sharing of experiences when they met each other in various forums and occasions. For example, members participating in the cooperative meeting might talk about growing crops or solving particular problems in the standing crop. Other members attending the meeting would also learn and benefit from such conversations. Moreover, members exchanged knowledge and experiences to solve the problems seen in the standing crops.

*“We also meet each other when there is a problem (insect, pest etc.) in the standing crop of any of us. We discuss about the causes of the problems and the possible remedy, because technicians live in distant place so we first discuss why not to try to manage or solve the problems.” (P 2-3)*

##### ii) Marketing Support

Although only a limited role of the cooperative in produce marketing was reported, bonding and bridging social capital were apparently utilized by the members in marketing of their produce. Member farmers having marketing information of a particular distant market shared information when they supplied the vegetables to those markets, owing to too big volume to be sold in the local markets, or due to the price factor. The members would collectively supply the vegetables a particular market and assign one of the members to take on the responsibility of contacting the traders, collecting and transporting the produce up to the market.

Moreover, sometimes traders from local and distant markets would come to the village itself to collect the vegetables. So, as the secretary of the cooperative also said, through bulking their production member farmers had been able to attract big traders into the village and bargain for better prices. Even before the formation of the cooperative, some farmers were growing vegetables for the market but they faced marketing problems. For example, if they reached the market to sell the vegetables on a retail basis sometimes it meant sacrificing a whole day to sell petty quantities like 30 kilos. They would not even have received a reasonable price.

The role of the cooperative in marketing support was largely limited to managing vehicular arrangement to transport vegetables up to the Triyasi collection centre, and sometimes even distant markets during winter, when a four-wheeler can run in the village earthen track.

#### iii) Micro-credit

Most of the participants said the provision of micro credit was the main service they received from the cooperative by virtue of their membership. This service was the main reason for the members to be affiliated with the cooperative. In other words, it was the main binding force for the members in the cooperative. Although, being a member was minimum condition to access to loan, a borrower's social capital in terms of trustworthiness would increase the chance of getting loans. Moreover, participants also said members sometimes received fellow members' recommendation in receiving loans from the cooperative.

#### iv) Crop insurance

The cooperative administered the crop and livestock insurance program supported by the government. Most of the members involved in market-oriented vegetables had contributed in the collective risk sharing by participating in the scheme. Participants applauded this program as it rescued them from loss when natural calamities happened due to crop failure.

#### v) Community work

Participants said members had contributed labour and money in collective work or projects launched by the cooperative. Initially, they completed solar power based lifting irrigation system in the village which supplied drinking as well as irrigational water. They also built cooperative office building by their labour contribution.

#### ***4.3.3.2 Utilization of Bridging Social Capital***

Participants mentioned that at the individual level, a few members had developed a limited bridging social capital in the form of trust based relationships with traders from local and distant markets. Such members would acquire market information from these traders and would share it among the fellow members. Such members assembled vegetables produced by non-members and assigned another member or non-member villager to transport them to the market and handover to the pre-fixed trader. The trader received the stuff and sent the payment back with that person. At the organizational level, Triyasi cooperative assisted this

cooperative in the market management of vegetables by providing access to collection centre facilities.

#### **4.3.3.3 Utilization of Linking Social Capital**

At the individual level only a few members were found to have individual access to outside resources utilizing their linking social capital. One participant (P 2-10) said: *“The other day I visited the Regional Agricultural Directorate and met with the RD (Regional Directorate). I requested him to provide one sprayer (on subsidy). He managed to provide that. I have received supports from regional soil laboratory too.”*

Participants also said the chairman and some board members had been able to bring in support to the cooperative by approaching various service providing government agencies. The chairman gave a couple of examples of utilization of linking social capital: *“...We request them (DADO staff) to visit our place if anything happens to the standing crop. They easily accept our request and visit our field, and offer advice to solve the problems. Likewise, we also approach the Regional Agricultural Directorate when we are in need of anything.”*

Participants also mentioned learning various farming related technologies and information through participating in DADO implemented extension programs and activities. They said they participated in various training programs and farmers’ tours of government agriculture farms and successful farmers’ fields. They met with different people, including higher agriculture officials, technicians and other development workers, and other farmers.

#### **4.3.3.4 Impact at Individual or Household Level**

##### **i) Increased Farm Income**

A majority of participants said the cooperative had contributed to improving the livelihood of the members with increased farm income through engaging in vegetable production. They said members had become capable of managing their household expenses and achieving better education for their children.

*“We have been able to make (good) money out of our production. We don’t have any problem to manage small expenses wherever we go. We no more require pleasing anybody seeking credit. Likewise, we have been able to manage our*

*household expenses and children education and that also treating our family guests and relatives appropriately.” (P 2-5)*

Another member recalled that he was in a miserable financial situation in the past but was much more comfortable now he could save his earnings from selling vegetables by participating in the cooperative saving and credit scheme.

#### ii) Capacity Building and Empowerment

Most of the participants said member farmers had developed their capacity in vegetable farming and marketing by virtue of social capital. They had attended sessions covering different aspects of vegetable farming, marketing, and resource management provided mainly by DADO, Syanja, and some other service providers. They had also been able to develop their capacity through participating in various other extension activities such as farmers’ tours, interaction and exchange of ideas and information with fellow members, and interaction with visiting agriculture technicians and experts.

Empowerment is another important change brought about by developing social capital. Members said they have become more knowledgeable and smarter than in the past through their involvement in various cooperative activities. They also said they developed confidence in dealing with people about their farming issues and in accessing outside support agencies for various forms of assistance. Likewise, in the past, village women were unable even to introduce themselves before a new face or in the mass. They also used to hesitate when they needed to attend any formal meeting in the village. One of the female participants (P 2-9) highlighted the change especially in women members: “... *But after becoming the members we have been participating in various cooperative activities including training which has made us to move forward beyond the ritual household chores.*”

#### **4.3.3.5 Impact at Community Level**

##### i) Increased Trend of Vegetable Farming

Participants said in the past, villagers used to grow mainly traditional upland cereals such as maize and millet. Later, with the formation of an FG farmers started vegetable farming instead of poorly performing cereals. The trend of vegetable farming increased remarkably in the village after the completion of drinking-cum- irrigation water scheme in the village. This

had become possible after the cooperative was formed and the government support for the scheme was made available to the cooperative.

The trend of vegetable farming extended beyond the cooperative as non-member villagers were also increasingly involved in vegetable farming.

#### ii) Decreasing Trend of Youths Going Overseas for Employment

Some participants said there was positive change in the village because, compared to the past, fewer young people were going overseas seeking work as unskilled or semiskilled labourers. They said that trend arose because of the good scope of vegetable farming or running other agriculture or livestock enterprises in the village. Moreover, there were a few members and non-member villagers who had returned from overseas for good to become involved in vegetable farming. Also, there were others who had returned to the village and engaged in vegetable farming, quitting their jobs in cities and towns outside the village.

#### iii) Positive Changes in Villagers

Most participants opined that the cooperative had also brought about a positive change in attitudes and perceptions. They also said it had spread a message of self-reliance and dignity among the villagers. Participants said they had learnt hard work would pay and that they should not be dependent on outsiders to do things for them. Also, there was a decline in negative engagements such as being drunk and playing cards.

A very small faction of members reported not much change in their livelihood and personal development after they joined the cooperative. They seemed to be indifferent towards the cooperative's activities and performance. Some of them showed some reservations about the cooperative functioning and even complained they were not approached and consulted by the cooperative management in relation to cooperative functioning and affairs. They did not go to see people in the cooperative management either. Such members also said they had not received much support from the cooperative except participating in and utilizing saving and credit scheme.

#### ***4.3.3.6 Impact on Cooperative Performance***

Like the previous cooperative most of the participants believed that unity was the basis of cooperative success. They said they were united because if they worked unitedly it would be

easier for them to accomplish any collective task. The chairman also said the main reason for the success of the cooperative was cohesiveness among the members. Participants cited the following reasons for the existing performance of the cooperative.

i) Impact of bonding social capital

a) *Transparency and Participatory Decision Making*

A majority of the participants opined that unity within the cooperative prevailed due to the board's transparency and participatory decision making, and not perpetrating discrimination among the members. The leadership engaged all the members in the discussion and decision making process.

Members had the opinion that if the leadership had not listened to their voice and made unilateral decisions unity could not prevail within the cooperative. One participant said the board would take the members into confidence before making any decision or embarking on any new venture. Another member (P 2-4) added: *"In our monthly meeting, they present upcoming programs. They also let us know if the cooperative has received any supports from outside and seek the members' suggestion about mobilizing that support. We offer suggestion about implementing any activities or mobilizing any supports. They then take any course of action following our suggestions."*

Moreover, the management board practiced transparency in its decision making process and its deeds. The board informed members about any new development or changes to be made or used the notice board to get feedback. Democratic norms and values were followed in its operation within the cooperative. Most of the participants also believed that the cooperative had been maintaining book keeping as per the existing cooperative regulation and other prevailing government rules and regulations.

b) *No Discrimination*

Most of the participants believed that within the cooperative there was no practice of biasness or discrimination against any member or group. One participant (P 2-5) and a senior member was looking confident when he said: *"We have not perpetrated any discrimination, biasness or exclusion, and favoritism within the cooperative so this is a secret (for successful run of the cooperative)"*

The board was also learnt to be distributing outside supports available to the cooperative and other cooperative services and facilities to its members in an equitable, unbiased manner. Another member (P 2-6) said: *“The cooperative management board has been equitably distributing any supports (material and non-material) coming from outside agencies to the cooperative, among the members without biasness.”*

*c) Harmonious Relationship*

Participants reported no internal conflict or issues within the cooperative since its formation. They said they had not even experienced any exchange of words between the members. Likewise, participants reported no negativity or ill intention among members.

*d) Commitment of Chairman*

The majority of the participants rated the chairman as the hardworking and active person. He was noted to have put efforts in approaching service providing government agencies and accessing various supports from them. One participant (P 2-10) lauded his role and efforts to bring the cooperative to the present state: *“He has made great efforts in approaching offices (service providing agencies). He knows many officials and has negotiated various supports needed for our village or cooperative.”*

He was democratic in his approach and reached any decision within the cooperative after rigorous consultation with board members and other general members. The chairman also gave advice to the members, even in household related and farming matters.

*e) Commitment of Members*

Participants mentioned about the crucial role of the members themselves in the success of the cooperative. All the members were, by and large, from farming background and were vegetable growers with common problems and needs which had brought them closer. Moreover, participants said members were active as all of them would instantly follow when there was any call from the board to accomplish anything within the cooperative. They also said members played a role as a watchdog as they kept eye on what was going on in the cooperative. Members scrutinized the account keeping and other affairs of the board members and the manager.



*g) No Arrogant Members and No Domination*

Likewise, most of the participants said there was no domination of particular persons or groups in cooperative affairs. They said they were aware of the fact if anyone within the cooperative tried to dominate others or show arrogance then that would affect the health of the cooperative and could eventually lead to its collapse.

*ii) Impact of Linking Social Capital*

A constant support and encouragement from service providing agencies and people has also played a crucial role in the success of the cooperative. The government agencies, mainly RAD, Pokhara and DADO, Syangja had supported this cooperative by providing various extension and funding supports. These agencies partially funded and coordinated the funding agencies to complete the lifting irrigation project in the village for drinking cum irrigation purpose.

*iii) Motivation for Maintaining Social Capital*

*a) The Cooperative Catering to Members' Needs and Aspiration*

The members were motivated to be united because the cooperative catered to their needs and aspirations and they feared they would lose the benefits from the cooperative otherwise.

The cooperative supported member farmers variously in their vegetable farming and marketing endeavors. Drinking and irrigation water was available in the village by cooperative initiation and management. With the availability of an irrigation facility more farmers had started market-oriented vegetable farming which had helped in increased family income of the members. Besides, members regularly enjoyed obtaining various services and facilities provided by the cooperative.

*"We members bear the helping attitude...Nobody would think only he should get benefit of opportunities. The reason why members here think so is because it is difficult for an individual to do marketing of their produces; they may not get reasonable price as marketing cost increases while doing individual marketing. But, if many members involve in vegetable farming there will be more production and we will be able to attract big traders in the village itself and we can also bargain for better price which will eventually help in farmers' income. ...So, this is the secret of the success of our cooperative." (P 2-6)*

Moreover, participants said they knew that it was difficult for an individual to market their produce; they might not get reasonable prices and marketing costs would increase by doing individual marketing. But, if many members got involved in vegetable farming there would be more production and they would be able to attract big traders into the village itself and they could also bargain for better prices.

*b) Fear of Social Sanction*

Participants said persons in the cooperative management, including board members and cooperative employees, always had a fear of losing goodwill if they committed anything improper. They were conscious of avoiding mistakes.

*“The cooperative manager and the board members think that if they commit anything wrong or involve in any malpractices in account keeping they will be exposed in front of the members. They have the fear of bashing by the members. They think they should perform well as many people are watching their work.” (P 2-14)*

*c) Shared Sense of Identity and Belongingness*

Participants believed that successful agriculture in their place had earned it an identity and reputation. They said successful agriculture in this locality gave them a separate identity outside the village. So, they were aware of maintaining this identity and reputation. They further said when people from outside started to come to visit their place, local people might realize that they should not commit any social offences; rather they should try to perform even better.

This section has presented a general description of Janakalyan Cooperative, process and mechanism of social capital building within the framework of cooperative development, and utilization and impact of social capital. It has shown that extension intervention played a crucial role in social capital building. It has also shown that monthly cooperative meeting was the main mechanism of social capital building.

## **4.4 Triyasi Agricultural Produce and Market Management Cooperative Ltd., Triyasi, Syanja**

### **4.4.1 General Description**

Triyasi Agriculture Produce and Market Management Cooperative Ltd., Triyasi, Syanja was the second cooperative from Syanja district selected for the study. It was chosen as one with relatively large membership size and located in highly accessible and convenient place. It was registered in 2007 with the objective of assisting local farmers in production and marketing mainly vegetable farm produce. This cooperative was the biggest in terms of membership and scale of operation of all the four cooperatives studied. Most of the members were farmers and the majority of them were engaged in market-oriented vegetable farming. The headquarters of the cooperative was located in Waling Municipality-8 at five km from downtown Waling city. The command area of the cooperative included whole Waling Municipality and adjoining seven VDCs. The cooperative had a big catchment covering more than half-a-dozen interior villages.

The total membership was 449, as of December 2012 with a good mix of members belonging to different social classes and groups. About 40% members were from *Brahmin* and *Chhetri*, two dominant castes in Nepal. Another prominent group of people came from various indigenous nationalities. About 5% members were from so called 'lower caste' as per the prevailing caste system of Nepal. Economically, members ranged from landless to owning up to two hectares of land. However, the majority of the members are smallholder farmers with average land holding size of about 0.75 hectare.

#### ***4.4.1.1 Triyasi as a Renowned Vegetable Production Pocket***

Triyasi is located along the Siddhartha highway in 30 Km West of Syanja city, the district headquarters of Syanja, and 60 Km West of Pokhara, the third largest city of the country and a popular tourist destination. Triyasi is a small township situated along the highway. The place is a famous vegetable production pocket of Syanja district. At the time of the study, different seasonal and off-season vegetables were produced in the settlements around the Triyasi and in nearby interior villages during the most parts of the year. Especially, tomatoes from this area were popular for their good taste and quality even in distant markets like Butwal, Pokhara and Krishna Nagar.

After harvest farmers would bring vegetables in to the Triyasi based collection centre operated and managed by the cooperative. Two nearby cooperatives would also supply vegetables to the collection centre managed by this cooperative. Before, farmers used to call in the traders from the distant markets but, with growing production, this location became famous and traders from distant markets started to arrive frequently because this spot had developed a good name and become a popular vegetable production pocket. Traders knew that they could get a good truckload of vegetables if they visited Triyasi. Also, it was very accessible as it was located along the highway.

Lately, the trend of commercial vegetable cultivation had been spreading to further interior villages after Triyasi had set an example of market oriented vegetable production and marketing. It had become much easier for member and non-member farmers to sell the vegetables. The change had been apparently possible after the establishment of the collection centre and the formation of the cooperative.

#### ***4.4.1.2 Historical Development of the Cooperative***

Vegetable farming in Triyasi village started in 1980s with the initiation and support of agricultural research and extension agencies. In the beginning, DADO Syanja, Agriculture Service Centre (ASC) Bayerghari and Lumle Agriculture Station taught the farmers about vegetable farming. An FG was also registered in DADO, Syanja. Since then this place had been developed as a famous vegetable production pocket in the region. However, in early days farmers did not have appropriate marketing arrangement. Farmers used to do selling of vegetables under the open sky in Triyashi town, which also served village outlet to other cities and towns. Farmers had to weigh vegetables tentatively using a bucket or other containers such as ‘mana’ or ‘pathi’<sup>13</sup> in the absence of any scientific weighing balance. Farmers would be cheated by the traders while using such apparatus as they could not give accurate weights. Farmers used to transport and supply to the nearby market of Syanja town (30 km) and other distant markets including Pokhara, (60 km) before the cooperative was established in Triyasi.

Local farmers participating in vegetable selling at that time discussed the alternatives for the marketing. They put in efforts to establish a collection centre. They also approached DADO,

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<sup>13</sup>Non-metrological devices to weigh stuff on volume basis

Syanja in this regard. Later, a sum of six hundred thousand rupees was provided for the construction of collection centre under the auspices of the DADO. Local farmers contributed labour in the construction. After the building was handed over to the collection centre management committee, farmers assigned one member from the FG to weigh and collect the fees for weighing the vegetables. This little step served as the foundation for the formation of cooperative.

On repeated visits of the officials from DADO, Syanja and other officials from higher levels, members of collection centre management committee and other local farmers kept requesting funding to expand and improve the collection centre structure and facilities to develop office space and meeting hall. Later, DADO agreed to help the local farmers in the building construction, under the flagship program called ‘Highway Corridor Commercial Agriculture Development Program’ if they could find the plot for the building. The program was implemented by RAD, Pokhara. Later, a mass meeting of farmers decided to form a cooperative as only the farmers’ cooperatives were eligible to apply for funding under that program. After the formation of the cooperative it applied for, and received, the grant. The cooperative bought a piece of land and constructed the building using the government fund.

The cooperative owned a three-room single story building of concrete built being used as office space and meeting hall, with some open space in its premises. Besides, there was another concrete built structure with two rooms being used as fertilizer godown and vegetable collection centre. The cooperative office was well furnished and equipped with computer, fax and phone with internet facilities.

#### ***4.4.1.3 Cooperative Structure and Governance***

An 11-member Board of Directors was also put in place. The board would generally sit once in two months but would meet more often if needed to make urgent decisions or take action in between two board meetings. Six regular staff, including the manager and an accountant, were employed to manage daily cooperative businesses and transactions.

Generally, farmers’ demands and concerns would first come to the cooperative and employees would record that. Cooperative manager and other employees would forward the farmers’ needs and concerns to the board if any policy decision was required. The board then would make an appropriate decision.

#### ***4.4.1.4 Cooperative Activities and Services Being Provided to the Members***

The cooperative provided limited banking services to the members. It provided collateral free loans for up to twenty five thousand rupees for the members while it offered loan up to three hundred thousand rupees on collateral basis. Members could also deposit their savings in the cooperative. It also provided various farm inputs and supplies, including subsidized fertilizers, vegetable seeds, pesticides and agriculture lime at cheaper rate than in other retail shops in nearby markets. Likewise, member farmers were provided with opportunities to participate in various extension activities including training and tours. Additionally, the cooperative also occasionally provided free seeds and other extension materials to members for demonstration purpose after receiving from the DADO. Also, it sometimes provided other services and facilities to the members to support and boost the production.

The cooperative also played an important role in the marketing of farmers' produce. The cooperative ran the vegetable collection centre for the collection of vegetables grown by members and non-members. The collection centre provided vegetable weighing services and a facility for the temporary storage of the vegetables. However, the cooperative was not directly involved in the marketing of vegetables as it did not itself buy vegetables from farmers and sell on its own. The cooperative just provided a venue for the transactions to take place between the producer farmers and the traders. The cooperative facilitated the selling of vegetables by linking the farmers to the traders. It usually made a telephone call to wholesale traders from distant markets and invited them to collect the vegetables from the collection centre. However, sometimes farmers themselves would call the traders.

#### **4.4.2 Process and Mechanisms of Social Capital Building**

##### ***4.4.2.1 Trigger of Social Capital Building***

Building of Collection Centre as a Marketing Support from the Government

Although Triyasi was a well-known vegetable production pocket from the 1990s, lack of proper marketing arrangements and facilities had affected farmers' ability to make reasonable profits. Setting up the operation of a collection centre in Triyasi apparently triggered the building of social capital among the local farmers. Systematic marketing of vegetables commenced with the collection centre. With these services, more and more farmers started using the collection centre. Local growers and others from interior villages started to bring vegetables in to the collection centre. While supplying vegetables to the collection centre

farmers would have an opportunity to chat with other farmers and exchange ideas and information on various aspects of farming and marketing. Such interaction between them helped build networks with fellow farmers and reinforce bonding ties between them.

#### ***4.4.2.2 Drivers of Social Capital Building***

##### **i) Market-oriented Vegetable Production and Selling**

With suitable local micro-climate and soil environment for vegetable production and access to the nearby and distant markets, Triyasifarmers were traditionally involved in vegetable production. The demand for Triyasi based vegetables, especially tomatoes was high due to their good flavour and better keeping quality. Therefore, economic potential in terms of greater vegetable production and marketing seem to have been the driver for the farmers to join the cooperative as they could get various production and marketing supports by virtue of membership.

*“Hard work of farmers has paid off and farmers have now understood that the vegetable farming could help in raising their standard of living. So, they are now attracted to this... they don’t have market problems of their produce as they can bring their products to the cooperative and sell them.” (P3-3)*

Thus, this awareness of the economic potential brought the local farmers together, initially in an FG, and later in the cooperative that facilitated building or reinforcement of different forms of social capital.

##### **ii) Produce Marketing**

Some participants said an anticipated easiness in produce marketing was one of the motivations for them to form and join the FG or cooperative. They said before the collection centre was built local farmers had to spend all day under the open sky in Triyasi town waiting for the customers to come and buy the vegetables. Moreover, there were no scientific weighing facilities. Such difficulties in marketing rendered poor profit margins for them. Highlighting the former marketing practice one member (P3-8) said: *“We used to sell our vegetables under the open sky. We used to weigh the vegetables using traditional container made from bamboo as we didn’t have scientific weighing balance at that time.”*

Other participants said they had perceived it would be easier to sell their produce through the cooperative.

### iii) Borrowing Facilities

Access to borrowing facilities was one of the main motivations for joining the cooperative. Members said they needed cash for inputs, labour and other farming expenses and they could get that with cooperative membership. One of the participants (P3-3) highlighted the importance of the cooperative in that regard and described difficulty managing cash requirement before: *“Farmers can borrow from the cooperative at cheap interest rate. Interest rate in this cooperative is also lower than other financial institutions...before, whenever we needed cash for meeting inputs and labour requirements during crop season we had to rely on local merchants and money lenders. Now, with this cooperative in place we can get a soft loan to meet our requirements.”*

Participants also said borrowing from the bank was not easy owing to the collateral requirements and lengthy administrative procedures.

### iv) Accessing Extension and other Supports

Some participants said they decided to join the cooperative with the objective of accessing various extension supports available to the farmers through the cooperatives.

*“An organization (farmer organization) is very important for the farmers as they cannot do anything without the organization. For example, when we are in need of some kind of supports from DADO, such as small or micro irrigation facilities, this cooperative recommends to the DADO and we get that support from DADO.”* (P3-9)

Moreover, a few participants said they joined the cooperative to be able to get various benefits from the cooperative by virtue of membership. One of such participants (P1-8) said: *“My objective of becoming member was to be able to access to the services and facilities to be provided by the cooperative.”* A small fraction of participants said they simply followed a whim by forming and joining the cooperative. They said they saw their colleagues and other farmers had joined the cooperative and followed them.



#### v) Accessing Government Funding Supports for Community Based Schemes

Some participants mentioned that accessing government funding to be provided only through the cooperatives for various local community based schemes was the main reason for establishing the cooperative. The Manager of the cooperative recalled the formation of the cooperative: *Before the cooperative there was a collection centre. There was on-going discussion about the further development of the collection centre. At that time there was the 'Highway Corridor Commercial Vegetable Production Program' under RAD, Pokhara. We approached the Regional Director (name). He suggested us to go for registering a cooperative if we wanted to be benefited under that program'. Local people in this place then realized the need and set up the cooperative.*”

#### vi) Farm Inputs and Supplies

Some participants said they decided to join the cooperative in the expectation of ease in acquiring farm inputs and supplies. They said they thought they would be able to get quality seeds from the cooperative. One participant said he joined the cooperative also to get quality fertilizers and seeds in a timely way.

#### vii) Collective Power of the Group

Perceived collective power of group also seemed to have motivated local farmers to form and join the cooperative. A substantial number of participants mentioned that it was difficult to carry out any task individually but would be easier to accomplish if worked collectively. One participant (P3-11) highlighted the importance of group: *“I have realized that it is essential for a person to be organized in any group or institution. If scattered persons join hands together they can accomplish even difficult and big task as the number of people grows from one to two, two to four and so on, things will be easier to accomplish.”*

#### viii) Other Potential Benefits

Some participants said they became members hoping that they would receive the various benefits that members could get from the cooperatives. So, their primary objective seemed to be able to access to the services and facilities to be provided to the members as one of the participants (P3-8) said: *“I became the member. So, my objective was to be able to access to the services and facilities to be provided by the cooperative.”*

#### ix) Learning Farm Technologies

A small portion of participants mentioned that learning farm technologies was one of their objectives of joining the cooperative. One of such participants (P3-11) said: *“The cooperative can facilitate mutual learning through the members teaching each other the various farm technologies.”*

#### **4.4.2.3 Mechanism of Social Capital Building**

##### i) Selling Vegetables through the Collection Centre

An overwhelming number of participants said selling vegetables through the collection centre was the main occasion for the members to meet with fellow members, non-members and traders. One participant (P3-10) mentioned: *“Main occasion for the meeting and interaction with the fellow members is when members bring the vegetables in the collection centre to sell.”* Another participant hinted about the possibility of bridging social capital through this mechanism: *“...When they (member farmers) involve in vegetable selling, they also become familiar with outside people.”* (P3-16)

##### ii) Members Visit of the Cooperative

Extensively, the participants indicated visiting the cooperative was another opportunity for interaction among themselves and various other stakeholders. After its formation the cooperative started a systematic saving and credit scheme and also selling farm inputs from the cooperative retail shop. One of the participants (P3-3) said: *“We members go to the cooperative only in some occasions like to sell the vegetables or get other cooperative services, and to attend meetings.”* When members visited the cooperative they would usually meet fellow members visiting the cooperative for the similar services. Members would also meet with the manager, other staff and board members as well. In such meetings, besides receiving services from the cooperative, members would also have a chance to interact with fellow members and other people to discuss various topics.

##### iii) Unplanned Meeting and Meeting in leisure

Some participants mentioned this as another forum for meeting and interaction with fellow members and cooperative executives. They commuted to Triyasi town to buy daily stuff or for a cup of tea.

*“We come here (Triyasi town) also for the shopping of daily goods as this is a centrally located place and villagers come to this place in other times as well besides when bringing the vegetables (to the collection centre). We discuss about which seeds to use, how to grow particular varieties and so on.” (P3-10)*

Members also met with each other incidentally in the village or farm and talked to each other about the cooperative and issues concerning its functions. Such informal meetings and interaction helped forge and strengthen bonding and ties among the members.

#### iv) Meeting with Outsiders Visiting the Cooperative

Meeting with outsiders visiting the cooperative was another frequent forum within the cooperative. Officials and technicians from DADO and groups of farmers frequently visited the cooperative. Interaction between visiting parties and cooperative members and executives took place in such visits as one of the participants (P3-14) mentioned: *“...when a person, or group visit our cooperative we are called to participate in the meeting or for interaction with the visiting party. We interact and exchange our ideas.”*

#### v) Ad hoc Meeting and General Assembly

Members would also meet with fellow members and cooperative executives at *ad hoc* meetings called by the cooperative management to discuss urgent and important agenda. Likewise, in GA as well members would have an opportunity of meeting and interacting with each other.

### **4.4.2.4 Enabling Factors**

#### i) The Chairman's Dynamic Role and Capacity

Most of the participants mentioned the critical role of the chairman of the cooperative in the formation, smooth functioning and success of the cooperative. He had played a decisive role in the overall growth and development of the cooperative since the beginning of the cooperative. Highlighting his capacity one of the participants said: *“He is a political person and has extensive links outside from grassroots to the central level which he uses for the betterment of the cooperative.” (P 3-9)*

He was serving his second term in the office. In his tenure he had accomplished a number of jobs which had proved crucial in the success of the cooperative. Some of his major

contributions involved registering the cooperative; managing funds for purchasing the plot for the cooperative office building construction; and office building construction, furnishing and installing IT services and facilities. Most of the participants believed that all these tasks would not have been possible for an ordinary member farmer to accomplish.

#### ii) Pre-existing Stock of Social Capital and Local Farmers' Commitment

Participants said pre-existing bonding and linking social capital also apparently provided good support in further development and reinforcing of these forms of social capital. Local vegetable growers impacted by the poor market management of their produce had joined together to form an FG. Later, arguably the bonding social capital built among the members of the FG helped in establishing the collection centre with funding support of the DADO which crucially helped to ease the farmers' woes in selling their vegetables. The start of the collection centre apparently reinforced and expanded bonding social capital. Similarly, limited pre-existing linking social capital played a role in the formation of the cooperative and subsequent funding of the office building construction. Level of social capital increased after the formation of the cooperative due to the enhanced opportunity of interaction and networking provided by the structure and function of the cooperative.

#### iii) Support from External Agencies

Government agriculture service providers such as Lumle Agriculture Station, Market Access Rural Development (MARD), RAD, Pokhara and DADO, Syanja, extended various extension support services and facilities, including the construction of collection centre, from the 1980s.

#### iv) Location Advantage

The location of the cooperative also seemed to have contributed in social capital development. The cooperative was located in very accessible and convenient place. Triyasi town was one of the market centres of Syanja district situated along the Siddhartha highway connecting two cities of Western Nepal, namely Pokhara and Bhairahawa. It is the epicentre for economic activities of local people from seven or eight nearby VDCs. With the cooperative appropriately located in accessible place, movement and visits of farmers and other stakeholders became frequent, which provided a number of opportunities for networking and interaction between various actors leading to building and reinforcement of social capital.

#### ***4.4.2.5 Manifestation of Social Capital***

##### **i) Bonding Social Capital**

###### ***a) Increased unity***

Building or augmentation of group bonding social capital within the Triyasi Cooperative was generally manifested in terms of increased unity or solidarity among members, and between the members and cooperative executives; shared feeling of identity; absence of internal rift or differences within the cooperative; and no division based on political beliefs. The presence of solidarity or unity among the members within the cooperative was reported by the majority of the participants. One of such participants (P 3-11) said: “....*we have a very good unity (among the members with the cooperative). We don't have any instances of leg pulling and conflicts between the members and we want to continue this spirit.*”

Members also stressed not experiencing any impact of local level politics on cooperative affairs. All the board members representing different political parties were united when it came to any cooperative affairs. Almost all general members, board members, and employees reported no serious internal disputes or differences within the cooperative. Moreover, while politicizing of everything was a common among rival political factions in recent times, all the three parties-general members, board members and employees- despite following different political parties in their life beyond the cooperative, did not mix their political beliefs with cooperative affairs.

###### ***b) Network***

The already existing but limited bonding social capital among a few local farmers apparently laid foundation for the establishment of collection centre. However, use of the collection centre and other cooperative services by the local producer farmers facilitated the building and further augmentation of networks among the farmers. As the chairman mentioned, the cooperative provided a platform for their interaction and networking: “*An Organization such as a cooperative provides a platform for members to build networks, share feelings and exchange ideas and information.*”

###### ***c) Norms of reciprocity***

Participants predominantly reported the change in bonding social capital in terms of norms of reciprocity among the members, and between the members and the cooperative management, after joining the cooperative. Highlighting change in norms of reciprocity, in terms of assisting fellow members in produce marketing after the formation of the cooperative, one participant (P3-10) said: *“Before, when it (the cooperative) wasn’t there, we used to follow our own way. We used to have our contact traders; we didn’t care about the selling of others’ stuff. Now, we try to help fellow members in selling their produces. Or, we all handover the produce to the cooperative to sell.”*

Moreover, given the large size of membership spread over a large area, norms of reciprocity among the members in terms of mutual cooperation and help among the members had increased after they joined the cooperative. However, it was rather confined to the members representing a particular village or settlement within the cooperative control area.

#### *d) Trust*

Most of the participants said they trusted fellow members and the cooperative management. They said they had been operating on the basis of mutual trust and had not met with any issues until that point of time. They said no members so far had cheated or deceived them. They further said they trusted employees because they had recruited the employees based on the latter’s track record of trustworthiness. The manager of the cooperative also appeared to believe that he had been successful in winning the trust of the cooperative members: *“So far I’ve experienced they trust me. Because whoever has deposited in the cooperative. I think he/she has done so thinking that I’m here. I’ve been told by many local members that they have deposited their money in the cooperative because I’m here. I’m a local person and cannot flee embezzling members’ deposits.”*

#### *ii) Bridging Social Capital*

Only limited building of bridging social capital was found. Some participants said the cooperative had maintained friendly relationships with the agricultural cooperatives operating in nearby villages. It directly assisted in marketing of agriculture produce collected in two nearby agricultural cooperatives by accepting vegetables produced by the members of the respective cooperatives and facilitating exploration of the market for their produce. Highlighting a good working relationship with the nearby cooperatives the chairman said: *“We have contact with other agriculture cooperatives operating mainly within the*

*production pocket. Our interaction is mainly about information exchange and in some cases partnership or collaborative activities are there. We usually have interaction with agriculture cooperatives about how to deal with common issues.”*

District Cooperative Union and District Agriculture Cooperative Union (DACU) were representative higher level cooperative bodies operating in the district. Primary cooperatives were registered through the district union. Sometimes it provided cooperative related training to its member cooperatives. The DACU was a rather new institution established in the previous year. About 25 cooperatives operating in the district were members in the Union. The chairman of the Union was one of the board members of this cooperative. The Union was pursuing a cold storage establishment project in order to provide storage facilities for the vegetables and other agriculture produces collected by the member cooperatives. Triyasi Cooperative was also contributing to the fund for that project.

At the individual level, bridging social capital of vegetable grower members was found to have developed with traders coming to collect vegetables in the collection centre. Farmers generally sold vegetables to one fixed trader coming regularly to the collection centre. The trader generally guaranteed the buying of total volume of vegetables supplied by the farmers which occasional and irregular buyers would not do. In this way, a trusting relationship had been established between the member farmers and the trader. Participants said through their involvement in vegetable selling members had developed bridging contact with other traders and other retail buyers of their produce as well.

### iii) Linking Social Capital

The majority of the participants revealed substantial change in linking social capital after they joined the cooperative. Linking social capital was found to have developed at individual member and organization levels. Participants mentioned that their access to DADO services had increased and interaction with DADO staff had increased after they joined the cooperative. They said in the past, whenever JTA and other staff personnel from DADO or MOAD visited the area, they would visit a certain farmer's field only, or they would come up on call only. General farmers did not have an opportunity to talk to them freely. But, after the cooperative was formed these staff usually visited the cooperative and member farmers could talk to them, seeking solutions to any farming issues or problems

*“Agriculture cooperatives are seen very positively by MOAD and DADO (DADDO Syangja). We have links with all the officer staff of DADO. They also come to our place. In the past, we didn’t even know the DADO staffs. Nowadays, when they see us they stop the vehicle and have chat with us. They ask if we have any problems. So, there is good relationship built (with DADO).” (P 3-10)*

At the organizational level the cooperative developed linking social capital by virtue of its increased links with various government and non-government service providers. The cooperative had built strong relationship with DADO, Syangja. The DADO had been supporting the cooperative right from its formation stage. There had been remarkable increase in visits by DADO officials and officers to the cooperative or members’ farms after the cooperative was formed. Besides DADO, the cooperative had successfully fostered connections with other supportive agencies, including local VDCs and municipalities, and other government agencies.

#### **4.4.3 Utilization and Impact of Social Capital**

##### ***4.4.3.1 Utilization of Bonding Social Capital***

###### **i) Marketing Support**

Most of the participants said the most important benefit of cooperative was marketing supports. They brought vegetables to the cooperative managed collection centre to sell to the traders who came from local and distant markets. The cooperative provided weighing services and temporary storage facilities. Moreover, it managed contact with, and calls to, the traders from the distant markets to collect vegetables. Participants said with the cooperative in place it had been much easier to sell their vegetables compared to the past. Likewise, the cooperative provided information about the daily price in major distant markets which helped the farmers in making marketing decisions.

However, very few participants mentioned any direct role of bonding social capital in produce marketing. One participant said he would get help from fellow members to ferry his load of vegetables to be supplied to the collection centre and trust prevailed between them. He further added: *“I can send my stuff (to collection centre) with a fellow member and I don’t need to worry about any malpractices or tampering with my stuff.”* (P 3-14)



## ii) Access to Credit

The cooperative provided limited banking services to the members. Members could deposit their savings by opening an account in the cooperative and also borrow from the cooperative to manage their farming and household requirements. Members could borrow loans up to a good twenty-five thousand rupees without collateral and up to hundred thousand rupees on collateral basis. Before, whenever farmers needed cash they had to rely on local merchants or money lenders. But with the cooperative in place they could easily get a soft loan to meet their requirements. Borrowing from the cooperative was also easier than that from the banks.

A few participants said that the norms of reciprocity that prevailed among the members had also helped them in accessing loans from the cooperative. Anyone in need of money could borrow from the cooperative following the recommendation of fellow members to the cooperative management. Other times, members in need of higher amount could approach the fellow members and garner guarantee required for.

## iii) Farm technology and Information

The cooperative facilitated mutual learning through the members teaching each other the various farm technologies. It helped members in updating their knowledge and skills in various aspects of farming and marketing through providing opportunities to participate in farmers' training and visit program, and during the visits of DADO staff and other specialists to the cooperative. Members were able to learn new farming technology and information through the exchange of ideas and information with the fellow members when they met each other in various formal and informal forums and occasions discussed in section 4.4.2,3.

## iv) Crop Insurance

Members utilized their bonding social capital in sharing the risk in farming activities through participating crop insurance services provided by the cooperative in collaboration with Agriculture Development Bank of Nepal. The cooperative played intermediary roles in applying the crop insurance scheme of the government. Farmers would get some compensation in case their crop failed through participating in this scheme.

#### **4.3.3.2 Utilization of Bridging Social Capital**

Only a fraction of participants believed that bridging social capital was helping them, particularly in marketing of farm produce. The cooperative management and member farmers had developed business relationships with the traders from distant markets. Such trusting relationships with the members and traders also helped in facilitating transactions between the two parties. One participant cited an example: *“If for some reason I am unable to go to the cooperative (Triyasi) with my vegetables I will telephone the trader, who is in Triyasi waiting for my stuff and say ‘I’m unable to come today, you please collect the tomatoes’ He collects my tomatoes and I will later get payment from him.”* (P-14)

#### **4.4.3.3 Utilization of Linking Social Capital**

Some members were found to have accessed various farming related technologies and acquired related information utilizing linking social capital developed at personal level by virtue of bonding social capital. Members were also found receiving farming related technical services and various extension supports from local ASC and DADO. DADO staff also visited their place frequently and taught them about various farming technologies. Likewise, occasionally, they also received seeds and chemicals free of cost. Such free of cost items usually came to the cooperative as extension materials from DADO, Syanja, or local ASC. Member farmers were unable to access these services before joining the cooperative.

*“When there was no cooperative in place we were even unable to receive technical advices from DADO. We had to rely on pesticide retailers about the dosage of the DM -45<sup>14</sup> pesticide who would arbitrarily recommend the dose for the spray. Now, they (DADO staff) visit our place frequently and teach us what to do and how to do in our farming. They teach us better way of crop management.”* (P 3-3)

At the organizational level, the cooperative developed linking social capital with various government agencies involved in agriculture development and received a range of supports from the beginning. DADO, Syanja, was the main among such agencies. The DADO provided a variety of extension as well as technical supports to the cooperative members. It mediated direct financial help to build structures including the collection centre and

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<sup>14</sup> A type of popular fungicide commonly used to manage late blight disease of cruciferous crops including potato.

cooperative office building. At the individual level as well, members used their linking contacts to bring in outside aid to this cooperative. As one participant said: *“We all members use our contacts, whoever might have wherever, to direct any support to this cooperative. We are committed on that.”* (P 3-4)

#### **4.4.3.4 Impacts at Individual or Household Level**

##### **i) Increased Farm Income and Livelihood Improvement**

Most of the participants believed that living standard of the villagers had increased because of their involvement in vegetable farming with the support of the cooperative. Increased household income and resultant improvement in living standard had been possible through their enhanced access to farm financing, farm inputs, markets, and their capacity building in various aspects of production and marketing, by virtue of cooperative membership, and by utilizing social capital.

##### **ii) Empowerment**

Members reported the change in their self-confidence and personality after joining the cooperative. One female participant (P 3-6) highlighted change occurred in her personality: *“.... before I used to consider myself inferior for being a rural woman and having not much outside exposures. But, now I am more confident and think that I may not be very smart but why to consider myself inferior. So, there is a change in my thinking.”*

Overall, the participants said they had become smarter and more knowledgeable than previously. Some other women members said they felt that their status had increased after they joined the cooperative.

*“Before, I was confined within the household premises. Now, I can express my feelings and present my ideas before the people without any hesitation. I have been given opportunity to put my views in the meetings. So, my confidence has been increased.”* (P 3-13)

#### **4.4.3.5 Impact at Community Level**

##### **i) Increased Trend of Vegetable Farming**

Elderly participants recalled that many people in this place were impoverished in the past. After they started vegetable farming they gradually realized that vegetable farming could be

their life-line enterprise. The cooperative continued promoting and supporting vegetable farming in Triyasi and nearby villages through assisting local farmers. Now, most of the local farmers were attracted to producing vegetable crops and many of them had already started vegetable farming after witnessing fellow farmers making good money out of it. Even people having another profession had quitted that and started vegetable farming.

*“Now, everybody has started doing vegetable farming. People having another main profession have also joined the party and engaged in vegetable farming.”*

(P 3-1)

#### ii) Role of Cooperative in Local Community Development

The cooperative provided employment to six local people which was possible due to the income of the cooperative. The cooperative was also instrumental in the development of the locality. There were once only a couple of houses in Triyasi but, with this establishment of the cooperative, movement of people increased; new houses were built; and the situation of local people also improved. Members were found to be proud of their place being developed and the cooperative was playing an important role in that. Moreover, inspired from the success of this cooperative, a couple of cooperatives had been started in nearby villages.

#### iii) Awareness and Positive Attitudes towards Vegetable Farming

A few participants said before cooperative membership they grew traditional cereal crops. Some members even used to consider vegetable farming as an inferior profession. But, after joining the cooperative they knew that vegetable farming was not an inferior profession, rather they could earn good money and esteem through this enterprise. Hence, farmers' awareness about the importance and value of vegetable farming had increased.

#### iv) Positive Changes in Attitudes

Some participants also said the cooperative had played a role in filtering unwanted or offensive behaviours in the society. They mentioned that they had witnessed that a few local villagers changed their previously negative attitudes and behaviour after becoming members. Participants believed that such persons had altered their attitude and behaviour because the environment within the cooperative was so good and harmonious that they learnt a lot from witnessing other members' behaviour and attitudes.

#### v) Collective Bargaining

The cooperative was well known in Syangja district and even beyond. As revealed by some participants, the cooperative was consulted sometimes by the related government and non-government agencies and officials. The cooperative was invited by such agencies to various workshops, and seminar or discussion forums about farmers' issues. With this increased engagement of the cooperative in farmers' welfare related activities its collective bargaining for more and better farmer-oriented services increased. The following quotation also substantiates this fact: *"Before the contact (with outside agencies) used to be on individual basis but we represent our cooperative nowadays, when we are invited in any program organized by any agencies they treat us as a representative of the cooperative the coop's fame has spread."* (P 3-11)

#### 4.4.3.6 Impact on Cooperative Performance

##### i) Impact of Bonding Social Capital

Majority of the participants said there was a good unity or cohesiveness among the members which had critically helped in cooperative success. Some participants also mentioned that good relationship prevailed between three parties- the board, employee and general members. They believed there were no major disputes and differences between these three parties and had played a major role for the success of the cooperative.

Moreover, a shared sense of identity and belonging prevailed among the members. They said the cooperative was running successfully because of the strong presence of 'we feeling' among the members.

*"There is 'we feeling' among the members. We all consider this cooperative as 'our cooperative,' so always strive for its betterment. The cooperative would not have been successful if the members had not had that 'we feeling' and hadn't concerned about its betterment. So it's like 'our' for many people."* (P 3- 6)

The impact of social capital in cooperative functioning and performance was expressed in terms of the following:

##### a) Commitment of chairman

A majority of the participants perceived the crucial role of the chairman in the success of the

cooperative. They thought his dynamic personality and leadership capacity helped to a great extent for the successful run of Triyasi cooperative. They said there had been no incidence of the chairman involving in any kind of malfeasances so far. He himself claimed to have chosen to spend his own pocket money over cooperative fund in accomplishing cooperative related tasks.

He had been able to lift the status of the cooperative and make the cooperative recognized by the government offices right from the district to central level. He had been always striving for provisioning and expanding member-oriented cooperative services and facilities.

*“The main credit goes to our chairman (for the cooperative success). He is a local political figure as well as social worker. It is exclusively because of his leadership we are in the present position. He has contacts right from the grassroots to the centre level. ... He has also been able to draw government funding through various projects and schemes...He always tries to find ways to benefit the shareholders. This is why we selected him for the second term through GA.” (P 3-9)*

*b) Members’ paying attention to cooperative affairs and utilizing cooperative services*

Cooperative members were found to pay constant attention to the affairs of their cooperative. They warned the leadership and employees against any wrong doing. They often visited the cooperative office. They met with board members and employees and acquired information about ongoing cooperative programs as well as different aspects of cooperative affairs and functioning.

While members criticized any wrong decision and act of the cooperative, they offered suggestions as well. Such interest and attention of the members in cooperative affairs and businesses had helped the leadership and the employees to avoid malpractice.

*“We come to Triyasi (the location of cooperative office) every day either bringing vegetables or in our leisure, visit the cooperative and seek information about how cooperative is running. The employees are local people like we shareholders. So, we shareholders are constantly pay attention to the cooperative functioning to ensure that it is running in a right path.” (P 3-2)*

Members also were found to have actively engaged in ensuring that only trustworthy persons

obtained loans from the cooperative and that the repayments were made on time. They also made loan follow up to ensure timely repayment by the borrowers. Likewise, members were found showing honesty by not defaulting and being regular in their repayments. Similarly, members utilizing the cooperative services also played an important role in the cooperative progress. Members bought farm inputs including fertilizers from the cooperative rather than buying from other places. They also deposited savings in the cooperative and obtained loans from it. Similarly, members were selling vegetables through the cooperative managed collection center which helped boost cooperative income and success.

*c) Good governance*

Most of the participants believed that the cooperative management or affairs had been transparent and there had been no instances of any financial irregularities in the cooperatives so far. The cooperative management had been able to maintain transparency in their account keeping. The chairman and manager of the cooperative said members could visit the cooperative office and could acquire information about general financial status of the cooperative. Participants also said whatever supports came from outside, the cooperative management distributed among the members without any discrimination. The chairman claimed that the cooperative was practicing democratic and participatory decision making. He further said: *“We sit and discuss about any issues or agendas. Members present their respective ideas and finally we come to an agreement to pursue the best course of action that best serve the farmers’ interest first. Also, when the cooperative is to launch a new program they arrange meeting of the members, seek members’ feedback and suggestions and accordingly move forward. So, our cooperative is successful because of these things.”*

Members were also found to believe that proper management of the saving and credit scheme had played an important role in cooperative success. Participants believed the strict rules for the lending might have played an important role in successful performance of the cooperative.

*d) Support of board members and employees*

Participants perceived the board members as selfless people striving for the betterment of the cooperative, as one participant (P 3-2) said: *“They (board members) have been striving for the betterment of the cooperative. They do hard work contacting local bodies and district based*

*government offices seeking funds and various programs for the cooperative and its members.”*

Participants believed the employees had been quite successful in running the cooperative business smoothly and transparently. The cooperative manager said employees discharge their duties with full sincerity and integrity. He further added if duties can be discharged in a neutral way, without any favour or prejudice, then there will be no need to fear for anything.

ii) Motivation for Maintaining Social Capital

*a) Continuous livelihood supports and fears of losing them*

Participants said members of the cooperative were getting livelihood supports in terms of greater ease in farm finance, farm inputs supply, marketing support, farm technology and information and risk sharing, among others. They said they would continue receiving such benefits from their cooperative only if they operated united.

*“Our needs prompted us to create the cooperative. As the cooperative has been successful in meeting our needs it has been able to bind all the members because if we are not united we may not be able to mobilize the coop. to fulfil our needs and aspirations.” (P 3-6)*

As the manager said, economic opportunities and challenges had brought member farmers together in one place. Other participants also seemed aware of the importance of unity as one participant stated: *“If the members are polarized and not active then the cooperative may collapse and members will stop receiving benefits from the cooperative.” (P 3-14)*

*b) Growing transaction and cooperative income*

With growing transaction income and fixed assets, the cooperative was growing continuously which, in turn, had served an important role in the success of the cooperative. The cooperative was making good income from weighing vegetables in the collection center. Citing the importance of vegetable collection for cooperative income another participant (P 3-15) said: *“If our cooperative makes profit or becomes rich, we all benefit as we won’t have to share the profit and assets with the government or anybody else.”*

Thus, the increasing and expected cooperative growth had motivated the members to



continue their ties with it and keep interest in cooperative affairs so that more benefits could be realized.

*c) Fear of sanction*

Fear of formal and informal social sanctions also seemed to have played a role for concerned parties. Especially board members and employees were found to be more conscious about potential social sanction as they appeared to believe that once caught involved in any kind of malpractices and wrong doing their goodwill would vanish. They knew once tainted that would be forever. Giving a practical example of potential sanction the chairman said: *“If I want to do some irregularities I will have to ask employees for that. They may then start bargain for their share as well. And I may end up letting them also misuse the cooperative fund. So, if you are honest nobody can raise fingers at you and at the same time you are indirectly putting pressure on other people to be honest.”*

*d) Sense of pride*

A few participants said affiliation with the cooperative was a matter of pride and status for them. Likewise, the chairman mentioned that he had earned respect of local people for successfully leading the cooperative. He added: *“For me, recognition the society has given to me and the regard and respect people give me is a wealth.”*

*e) Attaining political mileage*

The chairman said his job in the cooperative as the chairman was his stair to attain political mileage. For him, serving the cooperative was a social contribution which would help him in his political career as he thought without having done socially useful works one would not be successful in politics. He further said: *“Because, through social work a person reaches to mass and mingle with people and prepares ground for the politics. That’s what happened to me as well. I never did job. I was doing social work and was drawn to politics. Since my college days I have been in politics and am strong. The mass (local residents) wants me. ”*

This section has presented a general description of Triyasi Cooperative, process and mechanism of social capital building, and utilization and impact of social capital. The case study has shown that external support to the community and existed potential economic

opportunities played a major role in social capital building. Likewise, main leadership of the cooperative played a crucial role in expanding and utilizing linking social capital.

## **4.5 Khapaudi Agriculture Cooperative Ltd., Khapaudi, Kaski**

### **4.5.1 General Description**

‘Khapaudi Agriculture Cooperative Ltd.’ was selected as it represented the case of small agricultural cooperative from a peri-urban area. This cooperative was registered on November 7, 2007. The cooperative headquarters was located in Sarangkot VDC-2, Khapaudi, with the whole VDC as the command area of the cooperative. However, most of the members were from a village called Khapaudi. Most of the members were farmers and the majority of them were engaged in market-oriented vegetable farming. Unlike in other cooperatives, about two-thirds of the members in this cooperative were female farmers. Since a majority of the youths and some middle-aged men in the village were in overseas employment, most of the houses were run by female counterparts. Out of the 35 members, 22 were female.

Members needed to be a farmer and subscribe at least one share equivalent to NRS 100.0 with additional NRS 25.0 as an entry fee to become a member. In the post registration phase ten new members joined the cooperative to allow it to reach its tally of 35 in 2012. Most of the members were small farmers with average holding size of < 0.5 hectare. The majority of the members were from two dominant social groups prevalent in Nepal namely; *Brahmin* and *Chhetri* and few were *Janajatis*. Membership was drawn from each of the 35 households of the Khapaudi village.

#### ***4.5.1.1 Khapaudi Village and Vegetable Farming***

Khapaudi is located in the foothills of Sarangkot hills. Most parts of the village fall under the Ward number 2 of the Sarangkot VDC. Thirty five families had descended from the Sarangkot hills to this place about 30 years ago. Khapaudi is located at half-an-hour bus ride from the downtown Pokhara city, the district headquarters and the third largest city of Nepal. When visited, the village was connected by all-weather road to Pokhara city. Agriculture was the main profession of villagers and was largely shouldered by women and middle aged men as most of young men from the village were away with jobs, mainly in the Middle East and Malaysia.

Tomato was the main crop grown by the farmers. Other crops were cauliflower, cabbage, beans, cucumber, and radish. One member from each of the 35 households was a member in

the cooperative. All the 35 households maintained at least one plastic tunnel for tomato and cucurbits cultivation, with some members managing two to three tunnels, giving the total number of tunnels in the village to 40-45. There was a good market for the vegetables as the village was attached to famous Fewa Lake, a popular tourist destination. Farmers were able to fetch good prices selling vegetables to the nearby hotels and restaurants because of good demand for locally produced organic vegetables by these businesses. Local hoteliers would also visit farm gate to collect fresh vegetables. In case of big volumes, farmers would supply those to Pokhara city on an individual basis.

The situation was different until a few years ago. Most of the villagers used to buy vegetables from Pokhara city until five to seven years ago. They had become able to sell vegetables and make money to manage their household expenses by 2012. Before, farmers used to grow only traditional cereal crops. But, after they started vegetable farming, they remained busy round the year, mainly producing vegetables. Most of the villagers were attracted to vegetable farming because they had seen fellow villagers growing vegetables and making money. Unlike past days, when housewives would buy vegetables from the market they had become able to sell vegetables in the market. It all became possible after the cooperative was established in the village.

#### ***4.5.1.2 Historical Development of the Cooperative***

Huge landslides affected the village in 2006. Local people lost much of their cultivable land. In the same year, farmers lost their ready-to-harvest crop due to massive hailstone. The village was then on the verge of food deficit and starvation. In the aftermath of first massive flood, and then hail storm, DADO was approached through a local Junior Technician (JT). Officials from DADO and other government agencies visited Khapaudi. Until that time, local farmers did not have any idea of off-season or market-oriented vegetable production. Despite being located so close to big market of Pokhara city they were unable to exploit the opportunity. The visiting officials identified this location as having huge potential for commercial vegetable production because of readily available market. DADO officials also advised the villagers to get organized in a cooperative primarily to get cash support of three hundred thousand rupees under the 'Cooperative Irrigation Scheme' of DADO. With the DADO initiative the cooperative was formed and registered. After the cooperative was established a drinking water -cum- irrigation scheme was completed through the backing of DADO and SIMI Nepal.

With the availability of irrigational water, villagers started vegetable farming. Moreover, DADO also ran an IPM field school in vegetable crops in the same year 2006. The IPM field school proved to be instrumental in villagers' transition from subsistence farming to commercial vegetable production. The running of field school was critical in imparting necessary knowledge and skills of various aspects of vegetable production and crop management. Later a vegetable collection centre was also built with DADO support of four hundred thousand rupees and labour contribution from members. The cooperative also hired staff, and started a retail shop in a rented house, but it was later moved to a room in the collection centre building. At the time of fieldwork the cooperative shop was closed. After a few months of operation the cooperative failed to get subsidized fertilizers and other farm inputs, and other daily stuffs from concerned government agencies in the required amount, so it became harder for them to be competitive and manage the salary of the full time salesman for the shop. However, the leadership and members were planning to reopen it after harvesting and storing of their main crop rice was completed.

The previous year the cooperative started collecting vegetables in the collection centre for weighing before members made retail sales on their own. The objective was to collect some revenues for the cooperative through a service charge for weighing. But, not all members brought the stuff to the cooperative. Some defiant members escaped the cooperative and sold directly to the vendors or local hotel and restaurants. So, later this provision was scrapped and the cooperative stopped collecting vegetables in the centre. The centre was not in operation at the time of fieldwork. A number of other reasons were also given by the participants for the failure of collection centre. Firstly, members would bring vegetables only once or twice a week in to the cooperative. Therefore, the volume of vegetables was too low to be profitable enough to employ staff to collect and handle the vegetables, and send to market. There was a lack of truckload volume or market surplus, owing to small scale production by the small scale farmer members. Secondly, they did not have any problem selling vegetables because of good demand for locally produced vegetables in the local hotels and restaurants. So, it was learnt that member farmers did retail selling on individual basis locally in Khapaudi town and Pokhara city. Thirdly, they also lacked a vehicle to transport the vegetables to the market. Likewise, they apparently lacked marketing ideas and information, for example, how to contact traders; where to sell; and possible marketing cost and margins. However, they were mulling over reviving the collection centre with some changes in fee structure with fees based on price rather than volume basis. Moreover, they

seemed to be willing to try vegetable marketing through the cooperative if they could receive some support from the government, mainly in the form of a subsidy on a vehicle to be used for transporting vegetables to Pokhara city and other markets.

#### ***4.5.1.3 Cooperative Structure and Governance***

There was a functional 11- member cooperative management board. It comprised the chairman, the secretary, and treasurer and eight members. A couple of members and the local youths were supporting the cooperative in its administrative job and book keeping, on voluntary basis. The cooperative meeting was held regularly once a month and all the members participated. A board meeting was found to be held only infrequently. As with other cooperatives GA was held once a year to make public the cooperative progress and financial situation of the cooperative, and discuss the plan for the next year.

#### ***4.5.1.4 Cooperative Activities and Services being Provided to the Members***

The cooperative provided various production related supports to the member farmers. Saving and credit was the main service being provided to the members and was the main cooperative activity as well. All the members participated in the saving and credit scheme. Each member contributed NRS 50.0 on monthly basis and was invested among the members through lending for various purposes to support agriculture production. When the cooperative shop was running it sold chemical fertilizer, seeds and chemicals. Earlier the cooperative used to also sell daily goods as well, but later stopped selling these commodities owing to cut throat competition they faced from local retailers.

Members also received extension demonstration kits and materials provided by the DADO. They also participated in various farmers' training sessions and tours managed by DADO and other agencies. Likewise, the cooperative sometimes also arranged visit of the agriculture technicians to the village to find solutions for the problems in standing crops. In addition, the cooperative sometimes managed a joint nursery bed and distributed the seedlings among the members.

The cooperative owned a concrete built building originally made to use as the vegetable collection centre. After the cooperative had stopped collecting vegetables, the building space was used for cooperative retail shop. The building was also being used as cooperative office and a venue to hold the monthly cooperative meeting.

## **4.5.2 Process and Mechanisms of Social Capital Building**

### ***4.5.2.1 Trigger of Social Capital Building***

#### **Natural Calamity**

Natural calamity in the form of landslide and hailstorm apparently triggered the process of building social capital in Khapaudi village. The double strike of the natural disaster in the same year pushed the villagers into grave peril. They were on the verge of starvation that prompted the villagers to come together to tackle these adversities. In the aftermath they discussed approaching the related government agencies for various potential relief and rehabilitation supports.

*“Huge landslide occurred in 2006. Local people lost much of their cultivable land. Then one mass meeting of the villagers discussed about how to revive farming and make money. The meeting decided to approach the DADO (for support).” (P 4-15)*

### ***4.5.2.2 Drivers of Social Capital Building***

#### **i) Accessing Government Funding Supports for Community Based Schemes**

Almost all participants mentioned that the local villagers opted to form and register a cooperative to access government support systems in the aftermath of natural disaster. This potential benefit prompted the villagers to register a cooperative.

*“Following a massive flood, officials from district based DADO, cooperative office and staffs from other offices visited this place and encouraged us to get organized in the cooperative to get supports from these agencies.” (P4-10)*

#### **ii) Accessing Extension and Other Supports**

For some participants accessing extension and other support provided by extension and other government agencies motivated them to join the cooperative. One participant (P4-11) highlighted the importance of group and cooperative in accessing government supports: *“One thing is that we’ve learnt that we should move ahead with institutional arrangement like a cooperative because now outside supports especially government supports, such as from DADO and even from VDC, are channelized through the groups and cooperatives.”*

## ii) Market-oriented Vegetable Production and Selling

In the opinion of some participants exploring economic opportunities was a driving force behind the local farmers forming and joining the cooperative. In a dire situation, subject to natural disaster, local farmers apparently came to learn about the unexplored opportunities of farming in their village. Until that time, local farmers were involved only in traditional farming of cereal crops on seasonal basis.

*“Driving force could be potential economic opportunities and personal economic gain. We are very close to Pokhara city (so we can easily sell our products there). Our members can easily make money (producing and) selling vegetables. So, they have learnt that they could make good earnings if they involved in cooperative affairs and produced vegetables. They might think they don’t need to share their income with others that’s their income. So, these things are motivating factors for them in my opinion.” (P4-14)*

Thus, this realization of the presence of untapped economic potential also helped to bring all the villagers to one place and get organized in the cooperative and subsequent building of social capital.

## iii) Collective Power of Group

Some participants mentioned that farmer institutions such as farmer groups and cooperatives had a collective power, which they could utilize for their betterment.

*“Our country is agriculture country as most of the people dependent on agriculture any task may not be successful if done on individual basis but would be successful if carried out in group. So, it’s necessary to be in any group. For example, in here if there was only one person doing vegetable farming he/she would not know about how and where to sell his produce. No one truck would come to this place to collect his stuff. But, since there are many members doing vegetable farming they can call a truck (to collect their vegetables as they have vegetables in truckload volume).” (P4-15)*

Another member (P4-11) mentioned about the collective bargaining power of the group and cooperative in accessing government supports: *“If we approach individually our concerns*



*may not be taken seriously but if we approach representing any group or coop. we will be listened to seriously.”*

#### iv) Farm Inputs Supply

A small fraction of supply participants mentioned that they joined the cooperative in the hope of potential ease to be supplied with farm inputs. One of such participants (P4-15) described his motivation for: *“We can buy fertilizers from the cooperative at subsidized rate which otherwise would be expensive in open market.”*

#### iv) Access to Credit

For some participants an access to credit was one of the motivations of joining the cooperative. One of the participants (P4-7) mentioned importance of the cooperative as the source of cheap loans: *“We need money for household matters like vegetable production and if we borrow from outside interest rate is high. But, we can get loan from the cooperative in cheap interest.”*

#### v) Other potential Benefits

Some participants said they joined the cooperative in the expectation of accessing various material and non-material forms of assistance from the cooperative by virtue of membership. One participant (P4-7) said: *“I thought I could get other benefits from the cooperative and my situation would improve. I have now learnt that there are other benefits of the cooperative as well.”*

#### vi) Following Others

A few participants mentioned that they did not have any idea about the cooperative. They joined the cooperative after their relatives and other fellow villagers said that it was good to participate in a cooperative which would give various benefits. One participant even said she was a member in the cooperative because her husband did all the formalities for her to become a member and that she did not know anything about it.

#### **4.5.2.3 Major Mechanisms Facilitating the Building of Social Capital**

Many participants believed that villagers shared a common forum in the form of the cooperative. Participants said when many farmers come together forming a cooperative they

could discuss various issues of farming, strive for solving the common problems, and explore potentials of farming. There would be exchange of information and ideas when farmers met in the various cooperative activities and forums.

*“The cooperative has been serving as a platform for the members to share ideas and information and discuss farming related issues. When we do like this we learn from each other’s experiences and there will be cooperative environment as well.” (P4-16)*

#### i) IPM FFS

Like in the case of Janakalyan Cooperative, IPM FFS apparently served as an important mechanism of building social capital although it was not a regular mechanism for farmer interaction. Following the formation of the cooperative, a season-long FFS was run for the cooperative members to teach them about integrated management of vegetable crops and pests with the financial and technical support of the DADO. Participants said they also learnt about working in a group and became more aware of the potential collective bargaining power of the group. One participant (P4-16) added: *“That training helped us in learning various things about vegetable farming. We also developed a sense of friendship and mutual cooperation through that training.”*

After successful completion of the FFS, the participants started commercial vegetable production, mainly tomato, inside the plastic house in their upland field. Members who had developed bonds with fellow members during FFS continued to meet and interact in course of their vegetable farming and marketing which reinforced their bonding social capital.

#### ii) Cooperative Meeting

Most of the participants said the monthly meeting was the main forum for farmers’ interaction. In that meeting, almost all members turned up, so it was like a GA. Besides collecting monthly saving instalments and deciding on lending, the meeting would also discuss on-going cooperative activities and future activities, and improving the cooperative performance that could also take place with necessary decisions. The meeting would also provide members an opportunity to network and develop relationship with fellow members.

In between the regular monthly meetings, the cooperative could hold a meeting if needed to discuss an urgent or important agenda. Sometimes there was a visit of agriculture officials, representatives of other service providing agencies and farmer groups, or a team of outside entrepreneurs.

### iii) Informal Forums

Besides cooperative meetings, member farmers met each other in their leisure and in social and cultural events organized in the village. Especially, women members would also meet with fellow women members while fetching drinking water, and fodder from the forest. Also, exchange of labour among members in planting and other crop management activities had increased. Additionally, they shared conversations about various household related affairs, and farming activities such as timing and technological aspects of growing particular vegetables, or managing particular diseases or insects and so on.

### iv) Participation in Extension Programs

Interaction between members also took place when they participated in various extension activities, including training, demonstrations and tours. Such activities were mainly organized by the DADO. During these events member farmers may also have had an opportunity to interact with farmers from other places and agriculture technicians and officials about various aspects of production and marketing. Participants believed that such meetings and interaction had helped them in improve their farming as well as developing bonds among them.

#### ***4.5.2.4 Enabling factors***

##### i) Leadership

The role of the chairman was found to be critical in building social capital. Almost all participants praised his active role in the formation of the cooperative and its smooth functioning. They appreciated his role in tapping resources from outside for the cooperative and its members through building linking social capital. In a bid to access government help to cope with the precarious situation following double natural disaster strikes he had sacrificed his household tasks many a times. One of the participants (P4-10) assisting the chairman in managing cooperative affairs further added: *“It’s not that easy to establish contacts with the government offices and tap resources and services from these agencies. Not all can do that*

*job and they may not know how to access these agencies. So, he's been doing his job with elegance."*

#### ii) External Initiation and Support

A critical role of service providing government agencies, mainly DADO, Kaski was found in building social capital within the cooperative framework. Most of the participants said the DADO had supported the cooperative right from its formation process. In the post registration phase, it provided a major part of the funding to accomplish a drinking water-cum-irrigation scheme and vegetable collection centre. It also managed to provide one hundred thousand rupees to run the cooperative shop. Besides direct monetary support, DADO had also been able to impart knowledge and skills in IPM based vegetable farming; working in a group, and the importance of group cohesiveness. Members had received extension kits or materials, containing improved seeds and plastic sheets to make tunnels to grow vegetables. DADO also arranged regular visits of JT and JTA and other senior staff to the cooperative and the village.

Various supports and facilities from DADO encouraged member farmers to embark on market-oriented vegetable production and motivated them to participate actively in cooperative affairs in order to continuously receive support from the cooperative and from outside agencies, including the DADO itself. Hence, DADO helped build and reinforce bonding capital by facilitating the formation of the cooperative and then it contributed to further sustaining and maintaining of the bonding, bridging and linking social capital through its continued support and guidance.

#### iii) Role of Local Extension Agent

The local extension agent, a JT, based in the local Agriculture Service Centre (ASC), also apparently played a crucial role in social capital building. Most of the participants praised his role in coping with the miserable situation of the villagers following massive flood and hailstorm. When he was approached by some villagers he advised them to go for commercial vegetable farming through getting organized in a cooperative in order to be able to get targeted government supports. As a result, the cooperative was formed. Moreover, he also managed to arrange a visit of concerned officials from various development agencies to the village to discuss with the local people about how to deal with the adverse situation. He also

engineered to run an IPM FFS in the village which built members' capacity in vegetable farming and marketing. Accordingly, members started market-oriented vegetable farming.

*“Following landslide and hailstone five years ago farmers were left in miserable situation. They even didn't have any means to feed their family throughout the year. At that time we came into contact of locally operating DADO staff (name). He advised us to go for vegetable farming forming a cooperative. In fact, he is the person who encouraged us to form the cooperative.” (P 4-14)*

He also helped establish contact of villagers with the DADO and other service providers that brought various supports from these agencies into the cooperative. He had thus played a pivotal role in initiating the cooperative and its successful endeavour which clearly prompted social capital building and reinforcement within the framework of the cooperative.

#### iv) Pre-existing Social Capital

Use of pre-existing linking social capital by the local elites also seemed to have helped in initiating the process of formation of the cooperative and the resultant social capital building or augmentation. One of the influential villagers had a link with a JT from the local ASC. In the aftermath of the massive landslide and hailstorm he contacted the JT and managed to arrange a visit of affected areas by those officials with the aim of garnering financial support for relief and rehabilitation.

Moreover, the pre-existing bonding ties among the villagers also might have contributed to the formation of the cooperative and resultant building and maintenance of social capital. For example, Khapaudi village was a relatively new settlement. Likewise, almost all villagers had descended to their new location from a highland village. Similarly, many villagers were previously the members of local 'youth club' or 'mothers' club'.

#### vi) Similar Socio-economic and Demographic Characters

Members related other characteristics such as physical proximity, same farming profession and similar socio-economic condition that might have also contributed in building, augmenting and reinforcing the social capital. Members' houses were closely located and were arranged in cluster, making more interactions and fast communication among the villagers possible. Likewise, all the members were farmers and socio-economically in similar

condition. All these factors had facilitated more frequent interactions among the members and resultant building and maintenance of the social capital.

#### ***4.5.2.5 Manifestation of Social Capital***

##### **i) Bonding Social Capital**

###### ***a) Increased unity***

Most of the participants mentioned that there was a development of shared sense of unity or solidarity among the member villagers after they joined the cooperative. Participants also said they learnt that they could succeed if they were united and acted cohesively. One of the participants (P 4-11) said: *“There has been a development of unity and cohesiveness among the members. They have learnt that anything would be easier if worked in a group.”* Participants also reported the absence of any major differences and conflicts within the cooperative.

Most of the participants defended the functioning and performance of the cooperative, and the role played by the leadership. Likewise, they reported of no discrimination practiced on the basis of an individual's social status within the cooperative. According to them none was able to exert undue influence on cooperative affairs or show any arrogance while dealing with fellow members. They said rather that a shared feeling of “we are equal” prevailed within the cooperative. Also, members' loyalty to the cooperative and its leadership and shared feeling of striving for the betterment of the cooperative were mentioned by the participants, indicating presence of a good stock of group bonding social capital. Further, within the cooperative, members followed leadership's instruction and call without fail which highlighted the “we feeling” and unity within the cooperative.

###### ***b) Network development***

Participants largely said the cooperative helped them in networking with other farmers. They noted that before joining the cooperative villagers did not involve much in any networking and interaction with fellow villagers. After the cooperative was formed, villagers, especially women, started to come out of their homes and mingle with fellow members. Initially, through their participation in IPM FFS, members were able to build or strengthen their ties with fellow members. Likewise, unlike the past, women villagers started increasingly taking part in meetings, gatherings and other various cooperative activities. These forums and

occasions served as a means for them to meet and interact with friends and colleagues around various topics of mutual interest, leading to further strengthening and reinforcing bonds between them. Indicating building of bonds among the member farmers one participant said: *“We 35 members have become close after becoming the members. We interact about the vegetable farming, lending from the cooperative. We meet on the first Saturday of the month in which we discuss vegetable farming related problems and possible solution.”* (P 4-8)

*c) Norms of reciprocity*

A majority of participants mentioned that members helped fellow members out when the latter were in emergencies or in dire situations. For example, they had managed to help financially when one member had to rebuild his house destroyed by storm. They had also helped another member gain medical treatment of a family member through the cooperative. Likewise, benefits that individual members were entitled to were shared among the members. In one example, five members shared cash benefits, accrued by virtue of their participation in one training program, among the members.

*“Five of us also received disaster management training. We were given cash handout for buying net to protect crops from hailstorm as this area is heavily hailstorm prone. But we did not use that money given to individual, on our own, rather we discuss in the cooperative meeting and used that money to buy net for three farmers and we deposited remaining amount in the cooperative account.”* (P 4-2)

Members were also found exchanging vegetable seedlings among the members, sharing ideas, information and experiences in resolving various farming issues and problems, and exchanging labour in planting, crop management, and harvesting. Highlighting the prevailing norms of cooperation and reciprocity within the cooperative one member said: *“We also raise seedlings in one plot and put our knowledge, skill and experiences to grow healthy seedlings and once ready we distribute among ourselves. When we do like this we learn from each other’s experiences and there is also development of cooperative environment.”* (P 4-16)

Participants said the development of norms of reciprocity and mutual cooperation among the members took place following their participation or engagement in various cooperative affairs and activities and their interaction with fellow members.

#### *d) Trust*

Most of the participants said there was a development of trusting relationship between the leadership and members. The leadership had been able to win the trust of the members. Participants said they trusted the leadership because the latter had maintained transparency in financial matters and in other cooperative affairs and functioning. They said they also trusted plans and programs proposed by the leadership and supported them to go forward with such plans and programs. One of the members (P 4-17) explained trust building mechanism: *“Main thing is our leadership has become able to win the trust of the members. We members, on the other hand, have been lending our supports to the leadership in their endeavours and have been encouraging them to move forward.”*

Members were also found to promptly follow any decisions made by the leadership vis-à-vis cooperative affairs showing their trust. They said it was because they had faith in the leadership they made labour and cash contribution towards completing village drinking water-cum-irrigation scheme and contributed labour in the construction of their collection centre.

Cooperative leadership was found to practically rest on chairman's shoulder. Most of the participants were found to have a high level of trust in him. One of the participants (P 4-10) commended his leadership capability: *“He might have the leadership quality since the beginning. It could be due to his leadership style people have vested a trust on him and he has been successful to live up as per the people's expectation.”*

Similarly, none of the members reported any issues with the level of trust among the fellow members. Rather they reported the norms of reciprocity and cooperation prevailing within the cooperative because of trusting relationships among the members. A few members linked the trust for a fellow member in terms of the latter's track record in the repayment of the loan taken from the cooperative. However, a conditional trust was also found prevailing within the cooperative when it came to lending decisions. Before making a decision on lending in the monthly meeting, board members and general members assessed the repayment capacity and the track record of the potential borrowers. However, there had been no instances of defaulting, which suggested trustworthiness of the members.



## ii) Bridging Social Capital

Only limited development of individual bridging social capital was found. Participants mentioned only a few opportunities to build bridging network within the cooperative framework. At the individual level members had developed a couple of potential networking forums with various people beyond the cooperative. One such forum was selling vegetables in the local town and Pokhara city. A few members revealed that there had been a development of durable networks between them and their customers.

Members said they may develop bridging social capital when they participate in farmers' training organized by external service providing agencies, mainly DADO, Kaski. On such occasions, members may establish contact and relationships with participating farmers from other places which may later be developed into a durable network between participating farmers. One female member expressed her passion about such training and said:

*“If I find any opportunity to participate in the training I go anywhere leaving my household tasks because through such training we can learn many things; we can see new things and meet new people.” (P 4-13)*

Only limited bridging social capital was found to have developed at the organization or cooperative level. The cooperative was a member of the District Cooperative Union. It was also a member of the District Agriculture Cooperative Union. The chairman himself was a treasurer in the Union. But, the cooperative had not received any assistance from the Union except a couple of training opportunities for board members and other general members in cooperative related aspects. No practical link and relationship between these two institutions were found. The Union was a rather new institution and hence was not in strong position to support primary agricultural cooperatives.

## iii) Linking Social Capital

With their increased or frequent contact with government agencies, members had developed linking social capital with such agencies, particularly DADO, Kaski. Members said membership brought new contacts with government service providers. Some of the members were in frequent contact and had good relationships, primarily with DADO and its staff. Members said they were in a position to access the DADO and its staff personally, seeking technical expertise about farming related issues and problems. Moreover, they could

individually tap extension initiatives for themselves, or for the cooperative as a whole. Highlighting the change in linking social capital building one of the participants said: *“Before we didn’t have any idea about the DADO but now we are in good relationship with them.”* (P 4-8)

At the organizational level, the contacts of the cooperative with service providing government and non-government agencies had started along with its formation. The relationship with such agencies had been further developed and strengthened subsequently. Agriculture technicians and officials visited the cooperative and the village more often after the cooperative was formed. Enhanced material and technical backing had been received by the cooperative as a result of increased and intensified visits and interaction between the cooperative and DADO.

The cooperative established relationships with other government agencies like DDC, VDC, Agriculture Input Corporation Limited (AICL), Salt Trading Ltd., and Divisional Cooperative Office. Likewise, the cooperative had been also supported by some non-government agencies including Smallholder Irrigation Marketing Initiatives (SIMI), Nepal, Red Cross and United Nations Development Program (UNDP).

### **4.5.3 Utilization and Impact of Social Capital**

#### ***4.5.3.1 Utilization of Bonding Social Capital***

##### **i) Farm Technology and Information**

A large fraction of participants revealed that they had learnt various aspects of vegetable farming and IPM technique through participating in IPM field school run in the village. Participants also said that they had learnt various vegetable farming related technologies through their interaction with the fellow members during cooperative meetings and other forums and occasions within the cooperative. Members benefited through the exchange and sharing of ideas and information among themselves when they talked about various aspects of farming, for instance: which seed was good, where to buy good quality seeds, how and when to grow a particular crop, and how to manage particular diseases.

## ii) Access to Credit

Most of the participants mentioned access to credit as the most important benefit of the cooperative. Generally, being a member and contribution to the saving fund are sufficient conditions to access a loan. Nevertheless, bonding social capital in terms of trustworthiness of the prospective borrowers would be helpful in accessing the loan. Participants said they took an account of the track record of prospective borrowers in repayments, and his/her neediness before reaching the lending decision.

## iii) Farm Inputs Supply

Accessing farm inputs and material was another advantage of membership. Cooperative members were able to get fertilizers and seeds from the cooperative shop until it had closed a few months previously. Before it was closed, the cooperative shop supplied inputs so members did not have to travel up to the city to buy such stocks as they did before the cooperative was formed. Similarly, participants said the shop also sold quality seeds and fertilizers to the members<sup>15</sup> when it was running. Only little direct role of bonding social capital was reported in accessing farm inputs. Participants said members often exchanged vegetable seedlings among themselves. It was found that there was a tendency for one member to maintain a vegetable nursery from the seeds obtained free-of-cost, from DADO and other service providing agencies, and to then distribute the well-established seedlings among the members.

## iv) Marketing Support

Most of the members retailed vegetables in the hotels and restaurants in the local town. When there was a big volume of locally produced vegetables, member farmers ferried the produce in the bus up to Pokhara city to sell either to vegetable retailers or to do footpath vending themselves. Participants said members exchanged marketing information, mainly about prevailing market price, with fellow members while doing retail selling.

## v) Labour Exchange and Helping Hands

Participants said members exchanged family labour for planting the crops, crop management and harvesting. Besides, members provided their labour to fellow members when organizing

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<sup>15</sup> As per the government regulations, non-members could also buy the subsidized fertilizers from the coop. but priority would be given to coop. members.

social and religious functions. Likewise, members received helping hands and necessary back up in case of emergency such as fire outbreaks, sudden illness, and death. One of the participants highlighted the use of such bonding capital: *“We all are living pretty close in the village. We exchange labour and offer help in case of emergency or anything untoward happened to the member.”* (P 4-16)

#### vi) Community Works

At the cooperative level the group bonding capital was found to have been utilized to accomplish some collective works within the cooperative. Participants said members contributed their labour to complete a small scale irrigation scheme with collection tank construction. Each member also made cash contribution of four thousand rupees for the construction of the collection centre besides providing labour. Likewise, members also took part in other community works.

*“... We involve in community works such as drinking water facilities, resting platform in village, building temples etc. After becoming the member in the cooperative we have developed a feeling of mutual cooperation and have been pursuing that.”* (P 4-1)

#### **4.5.3.2 Utilization of Bridging Social Capital**

Corresponding to the low development of bridging social capital, its use was also limited. Bridging social capital was found to have been utilized in gaining vegetable production and marketing related knowledge and information from other farmers and other people beyond the cooperative.

#### **4.5.3.3 Utilization of Linking Social Capital**

Linking social capital was found to have been utilized both at the individual and group level. Individual members were found to have utilized the linking social capital to access various outside supports and facilities. The members received cash and various material supports from service providing agencies. They learnt various farm technologies through a number of means, by virtue of their linking social capital.

Participants said villagers, in the beginning, did not have any ideas about what to do, and how to apply farm management. They said learning various farm technologies had become

possible due to the initiatives taken by the DADO technicians and staff members. Participants also said they had acquired various techniques and ideas related to vegetable cultivation and marketing from the local JT. Moreover, they had also participated in a number of training programs in various aspects of farming organized by service providing agencies, mainly DADO. They also received technical information from DADO staff making home and farm visits.

At the organization level, the cooperative had enjoyed various benefits from service providing government and non-government agencies. It had received financial support from DADO, MOAD and SIMI Nepal to complete the drinking water-cum-irrigation scheme. Likewise, it received financial aid from DADO/MOAD to run the cooperative shop and to construct the vegetable collection centre.

#### ***4.5.3.4 Impact at Individual or Household level***

##### **i) Increased Farm Income and Livelihood Improvement**

Most of the participants mentioned that there had been an increase in farm income and improvement in livelihood after they joined the cooperative. Unlike the past times, villagers were found to be making good money out of vegetables farming. The female cooperative members were able to manage their household expenses from the income from selling vegetables so could completely save what was earned by their overseas based husbands. One of the members highlighted the change in living condition of villagers: *“One obvious change has been in economic front. Before, the money sent by the overseas going male villagers would be exhausted in managing family living costs. But now housewives have been able to even save money after managing household expenses. So, they don’t spend the money sent by their husband from overseas at all.”* (P 4-11)

Participants said increased household income and improved livelihood of the members was possible due to capacity building experiences of such members in various aspects of farming technology, and increased access to credit and farm inputs, to which social capital had contributed.

##### **ii) Empowerment**

The greater part of the participants expressed the opinion that member farmers, especially women members, had become more knowledgeable and smarter after they joined the

cooperative. Their interaction with various people had increased by virtue of their participation in various activities within and outside the cooperative. In the past, women used to remain within the household premises. But, after joining the cooperative they started participating in farmers' training and tour programs under the auspices of the DADO. Such exposure made them more confident in handling farming and marketing activities, dealing with people, or managing household affairs on their own.

Also, in the past, women villagers had to depend on their husband's income even for petty cash. But, when they had joined the cooperative and started the vegetable farming women became able to make good money through selling their vegetables. Highlighting her economic empowerment one of the participants said: *"...Now, we've been able to make some money and have proven that we no more need to depend on our husbands' incomes rather we can earn and manage family expenses. I think I have now become capable of managing my life on my own."* (P 4-8)

Likewise, they were even nervous to greet the people and or introduce themselves in the crowd before joining the cooperative. But after they became the member in the cooperative their confidence increased and they could talk freely to strangers or visiting officials from government and non-government agencies, and express their views. Recalling the previous time another female participant said: *"Before, I used to hesitate to speak to outsiders. Now, I can express my opinion and put my points before anybody."* (P 4-4)

### iii) Positive Change in Attitudes

Participants mentioned development of some positive attitudes after becoming the members. Members were more motivated towards working collectively or to engage in social work after gaining experiences of working in the cooperative. Likewise, members used to hesitate to go to market with the vegetables in bamboo basket carrying on their back, or ferrying produce on the bus. However, they said they had overcome such hesitation after they became members due to the expanding practice of vegetable cultivation and marketing in the village: *"Before we used to be uncomfortable if needed to sell the vegetables but now we can easily sell them in the market as we no more get ashamed to be selling the vegetables."* (P 4-1)

#### **4.5.3.5 Impact at Community Level**

##### **i) Market-oriented Vegetable Farming**

Most of the participants said there had been a remarkable increase in the trend of vegetable farming after the formation of the cooperative. The area under vegetables in the village increased every year. In the past, villagers used to grow a couple of vegetables in rainy season only. In contrast, after the formation of the cooperative, members started market-oriented vegetable production and had been able to produce different types of vegetables round the year. Villagers were transformed from buyers to seller of vegetables. One participant who also ran local retail shop of daily goods highlighted the changed scenario in the village and said: *“Before they (villagers) used to ask me to buy vegetables for them from the vendors but now they themselves bring vegetables to sell. So, before they had to spend money on vegetables but now they earn from vegetables.”* (P 4-13)

The impact of good returns from vegetable farming was such that some villagers who had been working overseas returned home and fully engaged in vegetable farming with their female counterpart. Moreover, villagers were attracted to vegetable farming after witnessing fellow farmers making good money out of vegetable farming.

##### **ii) Community Works and Services**

The villagers used to involve themselves in community works even before the formation of the cooperative. Villagers participated in community works such as completing drinking water schemes, constructing a resting platform, and building temples. However, participants said the trend of villagers taking part in such community works had increased after the establishment of the village cooperative.

##### **iii) Other Positive Changes**

There had been a good use of otherwise potentially wasted time of family members. In the past, after harvesting and storing the rice crop, male farmers used to waste time on anti-social pass times such as playing cards, being drunkards, or they spent time on unimportant gossip. Female villagers were also dependent on the income of their husbands employed overseas and doing no extra work at home. But with the increasing trend of vegetable cultivation and all it demanded both the men and women villagers always remained busy and avoided detrimental social activities. Also, habitual saving developed among the villagers, especially

cooperative members. One participant (P 4-6) cited the change: *“We used to waste much of our time before. Now, our family members who used to remain idle have been involved in vegetable farming.”*

A positive change in attitudes of the villagers was also reported. Villagers understood the collective power of group. In the same vein, the majority of the members spoke about the growing realization of importance of collective action among the members. Norms of working in the group for the mutual benefits arose. They had realized that it was difficult for them to manage different farming related affairs individually in the past but, by virtue of group effort, they were easier after joining the cooperative.

In the past, when there was no cooperative and villagers were not involved in vegetable farming, they used to be preoccupied in petty gossip centred around family and children, but after they joined the cooperative whenever they met each other they discussed the timing of vegetable growing, good choices of variety, disease and pest management that affected standing vegetable crops in particular, about the market price, and they speculated about other marketing related ideas and information.

#### ***4.5.3.6 Impact on Cooperative Performance***

##### **i) Impact of Bonding Social Capital**

Most of the participants mentioned that unity or cohesiveness among the members of the cooperative was mainly responsible for the success of the cooperative. Participants said members worked cohesively in the group and most of them had a feeling that they should lift the status and fame of their cooperative.

*“I think the main reason is unity among the members. We are also one by heart. It’s not the venture that could be accomplished by one or two persons...we members now know that we can improve our (socio-economic) situation if we are united.... We are aware that we have to strive for the betterment of the cooperative because this cooperative has given us a lot, we had nothing in the past this cooperative gave us our future, guided our ways.” (P 4-9)*

Moreover, no internal disputes and differences were reported. Also, within the cooperative, there was no discrimination among the members based on their social status. Arrogance or



domination of members with so called 'high' social status was not tolerated by other members in the cooperative. The good unity or high group bonding social capital had produced the following impacts.

*a) Commitment of the leadership*

The role of the chairman was found to be critical for the success of the cooperative. Participants used a number of adjectives to denote the role of the leadership including 'commanding', 'guiding and supportive', 'hardworking and giving', and 'unbiased'. He was also praised by the members for adopting participatory approach in cooperative affairs. One of the members said:

*"The role of the chairman has been crucial for the cooperative success. He's been doing good job. Members think he is indispensable for the health of the cooperative." (P 4-11)*

Equally crucial was the role of the board members. Good tuning between the chairman and board members was found. No major differences among members in the board were mentioned. The board has been able to accomplish a number of projects and schemes garnering the active participation and supports of the members.

*b) Good governance*

Participatory decision making process was found to have been adopted within the cooperative. Leadership was found to make any decision after discussion and consultation with the members present in the monthly meeting. The cooperative management was found to have maintained transparency in cooperative affairs. Transparency was maintained in book keeping and financial matters including income and expenditure streams as well as other cooperative affairs, for example, in making any decision and in the distribution of supports obtained from service providing agencies.

Good management of saving and credit scheme had also influenced the success of the cooperative. There was no outstanding loan. Similarly, most of the participants believed the cooperative management board to be fair, rational and unbiased. It was found to be ensuring equitable distribution of supports and opportunities coming from outside with priority given to needy and relatively resource poor members. Such fair and unbiased approach of the

cooperative management was found to be responsible for the absence of any internal issues or conflict and building or reinforcement of trust between the members and the cooperative management.

*c) Members paying attention to cooperative affairs*

Members themselves were found to have played a crucial role in the success of the cooperative. Most of the members were found actively participating in cooperative affairs and in their vegetable production and marketing activities. While they follow the leadership call for their participation in any cooperative affairs or collective action, they were also found to be paying attention to cooperative affairs and providing feedback to the leadership. Members discussed about various strategies to make the cooperative successful whenever they meet with each other in any formal or informal forums within and beyond the cooperative framework.

Members were found to have helped the cooperative management in its repayment drive through discussing among themselves the possible strategies to expedite the repayment from any member with an outstanding loan, and urging the potential defaulters to make timely repayment. Also, none of them had defaulted. One of the participants (P 4-2) opined that members' paying interest in cooperative affairs crucially helped in cooperative success. He added: *"If they show interest in the cooperative activities and warn and provide feedback to the committee if anything wrong happens, then any cooperative is bound to be successful."*

*d) Voluntary contribution of some youths*

A small group of local youths was assisting the cooperative executives in book keeping and other management tasks. Their support also apparently contributed to the smooth functioning and success of the cooperative. One of such volunteer said: *"We are voluntarily working for the betterment of the cooperative sometimes we use our own pocket money for the cooperative affairs. We've been doing this because we want to keep this cooperative and strive for its betterment for the welfare of the next generation. If we become able to run it smoothly next generation will be able to reap the benefits out of it."* (P 4-10)

## ii) Impact of Linking Social Capital

Participants said various government and non-governmental agencies helped the cooperative from the beginning but the role of DADO, Kaski was crucial. The majority of participants believed the stage of successful performance existed after DADO staff guided and supported them.

*“DADO, Kaski has been so supportive for us. It has all become possible due to initiation took by DADO. After massive flood and hailstone in this village, one of our leader farmers approached DADO. One staff then came to our village and helped farmers to get organized in a cooperative and start vegetable farming commercially. It is because of his command and leadership farmers followed his advices and we are now in this position.” (P 4-9)*

## iii) Maintaining of Social Capital

### a) Economic opportunities and livelihood supports

The cooperative catering the members' various needs of farming apparently helped in maintaining unity in the cooperative. Benefits accruing to a member of the cooperative made the members active in cooperative affairs and to their willingness to contribute in collective work to be implemented by the cooperative. Having fulfilled various needs from the cooperative and having benefited from various services and facilities, members' loyalty towards the cooperative had increased.

*“So, they have learnt that they could make earnings if they involved in cooperative affairs and produced vegetables. They might think they don't need to share their income with others that's their income. So, these things are motivating factors for them to be loyal towards the cooperative, in my opinion.” (P 4-14)*

Another participant added: *“After experiencing benefits of the cooperative and vegetable farming members are now active and willing to contribute (labour and cash) in collective work to be performed under cooperative management.” (P 4-8)*

### b) Fear of sanction

Participants said fear of potential social sanction prevailed among members and the leadership. They said no member could break the rules and defy any decisions because he or she would be questioned. He or she would not repeat the mistake..

*c) Influence of chairman's personality and hard work*

Participants said the dedication, hard work and commanding capacity of the leadership had motivated the members to stay united and strive for the betterment of the cooperative. They said mainly the chairman was able to unite members and use that strength for collective purpose within the cooperative.

This section has presented a general description of Khapaudi Cooperative, process and mechanism of social capital building within the framework of the development of this cooperative, and utilization and impact of social capital. It has shown that natural calamity followed by the anticipated external supports played a major role in social capital building. Moreover, community leadership provided a good support in augmenting social capital.

This chapter has presented detail case study of four cooperatives selected for the study. Based on the findings from individual case study, the next section will present cross-case analysis as per the conceptual framework of the study.

## **CHAPTER 5      CROSS-CASE ANALYSIS**

The purpose of this multi-case study was to explore the process and mechanisms of social capital building within the framework of development of agricultural cooperatives and its utilization and impact of farmers in rural Nepal. Social capital is argued to improve the performance of agricultural cooperatives in rural settings. It also helps improve the livelihoods of member farmers by enhancing their access to other forms of capital. Greater understanding of how social capital is built and utilized is expected to help better design and implement the extension and rural development interventions that also support social capital building in rural farming communities, with ultimate impact on rural livelihoods.

The purpose of this chapter is to compare and contrast patterns or themes that emerged from within-case analyses. Such patterns are developed through checking for intra-group similarities and inter-group differences among the themes. The emergent patterns and their relationships were compared with the evidence from each case in an iterative manner to assess how well the emerging pattern fits with the case data (Eisenhardt 1989). Eisenhardt also posits that those cases in multiple case studies which confirm emergent relationships enhance confidence in the validity of the relationships whereas those disconfirming the relationships provide an opportunity to refine the theory. Merriam (1998) also contends that one of the strategies of doing qualitative study is to enhance the generalizability or external validity of the findings.

The chapter is divided into two parts. The first part presents findings from cross-case analysis on process and mechanisms of social capital building. It contains four sections. The first section presents triggers and drivers of social capital building. Then section two gives an account of various mechanisms of social capital building. The cross-case analysis of the study has shown that there were certain enabling factors, which contributed to social capital building mainly by enhancing the effectiveness of various mechanisms. Section three gives an account of such enabling factors. Section four is about manifestation of the change in social capital built within the framework of development of agricultural cooperatives.

Part two is divided into three sections, namely utilization of social capital, impact on rural livelihood, and impact on cooperative performance.

## 5.1 Process and Mechanisms of Social Capital Building

### 5.1.1 Triggers and Drivers of Social Capital Building in Rural Farming Communities

This section provides the cross-case analysis of triggers and drivers of social capital building associated with the development of agricultural cooperatives in rural farming communities. Definitions of triggers and drivers are given in Section 4.1.

#### 5.1.1.1 Triggers of Social Capital Building

The cross-case analysis showed that development interventions and local stimuli triggered the building of social capital in rural farming communities by prompting local farmers to initiate collective action for mutual benefits. Table 5.1 shows the types of trigger observed across the cases.

**Table 5.1 Types of Trigger of Social Capital Building Evident across the Cases**

<b>Types of trigger</b>	<b>Evident in case</b>
Development intervention	Janakalyan Cooperative
	Triyasi Cooperative
Local stimulus	Mirmire Cooperative
	Khapaudi Cooperative

#### i) Development Intervention

Development interventions pertinent to extension and farming support apparently triggered the building of social capital in two of the cases. In Janakalyan Cooperative, extension intervention in the form of the FFS to enhance farmers' knowledge and skills on IPM brought local farmers into one forum. While attending FFS on a weekly basis for discovery based learning, participating farmers built and renewed bonds with fellow participants by their repeated interaction and exchange of ideas and feelings while in the group. Moreover, FFS also enhanced interaction of participants with the facilitators and other extension officials which helped in the subsequent building of linking social capital.

The successful running of the FFS led to the formation of Janakalyan Cooperative. The cooperative then provided various mechanisms within its structure and process to facilitate further development and reinforcing of the bonding social capital.

In the case of Triyasi Cooperative, construction of the collection centre building to solve the problems of venue for vegetable selling appeared to have triggered the social capital building.

Through the local DADO, the government provided financial support to construct a building popularly called '*Tarkari sankalan kendra*'<sup>16</sup>. The operation of the centre apparently triggered the building of social capital when local farmers started selling their farm produce, mainly vegetables, through the centre. In the selling process local villagers had an opportunity to interact and develop network with fellow farmers, and traders from the local townships and from distant markets. The start of the collection centre led to the formation of Triyasi Cooperative which expedited the social capital building process, rendering more opportunities of building contacts between various actors. In sum, findings showed that development interventions in terms of launching participatory extension educational programs, and funding, or creating need based community services and facilities, triggered social capital in the rural communities.

## ii) Local Stimulus

Besides the external interventions, local stimuli also triggered the social capital building process. Stimulus was both deliberate and spontaneous. In the case of Mirmire Cooperative the stimulus was deliberate in the form of initiatives taken by an innovative migrant villager to organize local farmers in an FG to increase community bargaining ability in accessing public extension supports. The stimulus was spontaneous in the case of Khapaudi Cooperative, in which local farmers were prompted to band together to tackle their desperate situation in the aftermath of natural disaster in the village and form a cooperative in order to access government supports. Both the stimuli prompted community members to join hands in order to perform collective action for the mutual benefits, which apparently triggered the building of social capital. Thus, analysis showed either spontaneous (such as occurrence of natural disaster), or deliberate (such as initiatives of local leader farmer) local stimuli, triggered the social capital building process.

The cross-case analysis also showed that the community power generated as a result of local stimuli was directed towards accessing extension and other government supports by creating network in the form of informal FG, or formal cooperative which helped steer the process of social capital building. In other words, external supports were needed to maintain the tempo

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<sup>16</sup>A building structure, commonly called as collection centre, built to collect locally produced farm products mainly vegetables deemed to be supplied in the distant markets. Such buildings generally provide venue for temporary storage and weighing of vegetables in Nepal. In recent years establishment of such collection centres has been growing with increased government supports in produce marketing in Nepal.

of trigger occurring due to local stimuli, and steer the social capital building process. On the other hand, development intervention could further the social capital building process independently, although such interventions, too, eventually led to the formation of FG, or the cooperative and steered the process of social capital building. In conclusion, it appeared that the influence of development interventions and supports were critical in triggering the social capital building in the rural farming communities. Such interventions and supports either triggered the building process, or bolstered the trigger by providing a support.

### **5.1.1.2 Drivers of Social Capital Building**

Table 5.2 presents the summary of drivers of social capital building evident across the cases. The triggers were found to be combined with some drivers in the process of social capital building.

**Table 5.2: Summary of Drivers of Social Capital Building across the Cases**

<b>Drivers</b>	<b>Themes</b>	<b>Evident in cases</b>
Poverty and livelihood	Potential benefits	All Cases
	Accessing extension and other supports	All Cases
	Access to credit	All Cases
	Farm technology and information	Mirmire, Janakalyan and Triyasi Cooperatives
	Farm input supply	Mirmire, Triyasi and Khapaudi Cooperatives
	Produce marketing	Triyasi Cooperatives
	migration	Mirmire Cooperatives
Government policy	Accessing government funding supports	Janakalyan, Triyasi and Khapaudi Cooperatives
	Accessing extension and other supports	All Cases
Economic opportunity	Market-oriented vegetable production potential	All Cases
Collective bargaining	Accessing extension and other supports	All Cases
	Perceived collective power of group	All Cases
	Produce marketing	Triyasi Cooperative
Socio-cultural	Following others	Mirmire, Janakalyan and Khapaudi Cooperatives
	Migration	Mirmire Cooperative

While trigger prompted local farmers come to one place to strive for collective action and served the foundation for organizing such farmers into an FG or an agricultural cooperative, driver, on the other hand, bolstered the social capital building process by providing rationale and motivation for the formation of cooperatives and local farmers joining them. In other words, drivers were associated with the reasons that prompted local farmers to form and join the cooperative, which provided a framework for building and reinforcing the social capital.



Cross-case analysis showed five drivers of social capital building in the context of the case study cooperatives. The drivers were generated from eleven within case themes. Three themes, namely, accessing extension and other supports, produce marketing, and migration were found related to more than one drivers.

#### i) Poverty and Livelihood

Poverty and livelihood appeared to be the main driver of social capital building across all the cases. This driver captured seven out of eleven within-case themes (Table 5.2). The majority of the members of all the cooperatives were small farmers toiling hard in their farm to make their living. Accessing free-of-cost extension material and non-material benefits from government service providing agencies, mainly DADO, was the main motivational factor for such farmers to join the respective cooperatives. Substantial numbers of participants from all the cooperatives mentioned this as the main reason for them to become members. Participants frequently mentioned expected benefits such as free seeds, subsidized fertilizers, training, and educational tours as their reasons to become cooperative members. Compared to other cooperatives such participants were fewer in the case of Triyasi Cooperative. Owing to historically established vegetable production pocket, many local farmers were moving towards semi-commercial and commercial scale production. They seemed to be in need of regular supply of inputs, easy access to farm loans and improved marketing arrangement rather than free inputs to be provided as a component of extension educational activities.

Besides, while the majority of participants in all case study cooperatives had an idea about their entitlements as a cooperative member to receive government and extension supports and services at individual as well as group levels, there were some participants who did not have specific ideas about the potential benefits of membership. Such participants would generally say that they became a member ‘in the hope of getting some benefits’ from cooperatives although they did not have specific ideas on types of potential benefits. A few of such participants had merely followed other farmers who had already joined the cooperatives. Another major motivation of local farmers for setting up and joining the cooperatives was in the form of expected increased and easier access to micro-credit through the saving and credit schemes to be run among the potential members of the cooperatives. Participants repeatedly used words and phrases such “*as loan*”, “*saving*”, “*deposit*”, “*saving and credit*”, “*borrowing*”, “*easy access to loan*”, “*repayment in installment*”, among the main reasons for joining the cooperative in all the cases. Saving and credit was found as the main activity

in all the case study cooperatives, indicating high relevance of this theme for the potential members to set up the cooperative. On the whole, members in the case study cooperatives were small farmers with relatively poor access to institutional or informal lending. They reported red tape and other hassles in accessing institutional credit. On the other hand, at times they were denied informal credit as the lenders perceived that they were financially weak and were not in a position for timely repayments. At other times, they had to pay very high interest to moneylenders or merchants.

Potential ease in marketing of farm produce was a motivation for participants from Triyasi Cooperative to form or join the cooperative. A vegetable collection centre was running before the cooperative formation but the registration of the cooperative would attract additional funding from the government for upgrading of collection centre facilities. So, local farmers were motivated towards joining the cooperative in the expectation of added ease in marketing of their produce.

Most of the participants across the cases reported issues of availability of vital farm inputs such as fertilizers and seeds in terms of their quality and quantity. However, only a few of them mentioned expected ease in farm inputs and supplies, mainly chemical fertilizers and seeds, as the motivation to join the cooperatives. Nevertheless, one of the particular motivations for some other participants was the government policy of distributing subsidized chemical fertilizers through the cooperatives.

In all the cases, barring the case of Khapaudi Cooperative, a small number of participants mentioned that an enhanced access to farm technologies was one of the motivations for them to join the cooperative. They said they could learn various farm technologies through farmer training and tours, and from fellow members. Migration also seemed to be another factor associated with the poverty and livelihood driver in at least one of the four cases. Members of the Mirmire cooperative had migrated from adjacent highlands hoping to escape poverty. The desperate situation they were in brought these villagers together, leading to the formation of the FG serving as the foundation for the building of social capital.

From the cross-case analysis it can be learnt that poverty and livelihood-related factors including, access to free extension supports, other unspecified material and non-material benefits and entitlements, and credit services were the most widely reported factors to motivate individual farmers to form and join the cooperative. Farmers also joined because

they anticipated input supplies and marketing would improve. Similarly, for a few participants, access to farm technologies was a motivational factor. Additionally, recent migration was found to have contributed to the perceived need of migrant villagers to form or join the cooperative in order to jointly solve the livelihood related issues.

## ii) Government Policy

Government policy of providing extension and other supports to the farmers through cooperatives also seemingly served as a driver of social capital building. Accessing government funding for local community-based small scale projects served as the main motivation at group or community level to form and register the cooperative in three out of four cooperatives as the funding was available only to the cooperatives. For example, the government policy of launching and funding the ‘Highway Corridor Commercial Agriculture Development Program’ only through the agriculture cooperatives was the prompt for local farmers to form and register Triyasi Cooperative. Formation of the cooperative in turn provided the foundation for building social capital. Likewise, funding support to small scale irrigation schemes from DADO prompted the local villagers to form Janakalyan and Khapaudi Cooperatives.

Similarly, an overwhelming number of participants across cases were found to have joined the cooperatives after knowing that local DADOs mobilized various extension and other government supports through the cooperatives. The Word Cloud (Figure 5.1) extracted from NVivo word frequency query shows DADO as the most frequently mentioned word by the participants about their motivation of joining the cooperative. Some of the frequently appearing words and phrases around the word dado (DADO) as the query showed were “*support from DADO*”, “*DADO initiative*”, “*DADO support*”, “*...approached DADO*”, “*DADO visited*”, “*...contacted the DADO*”, “*DADO staffs*”, “*DADO officials*” and “*activities launched by DADO*”. This indicates high relevance of DADO in extending various supports to the farming community.



**Figure 5.1: Word Cloud of Words Representing Motivation across the Cases for Joining the Cooperative**

Therefore, it can be concluded that the prime reason farmers joined the cooperative was to be able to receive support from the DADO at both individual and community levels which was guided by the extension policy of extending many supports to farming communities through FG and cooperatives. Moreover, the government funding policy directed towards cooperatives and groups was also instrumental.

### iii) Economic Opportunity

Presence of untapped economic potential apparently also served as another driver for the social capital building across the cases. The cross-case analysis showed that the potential economic opportunity in the form of market-oriented vegetable production and selling encouraged the local farmers to unite and strive cooperatively to pursue collective action. Although, in all the cases vegetable farming was the main economic activity, the level of commercialization and production varied across the cases. Within the catchment of Mirmire and Khapaudi Cooperatives the trend of market-oriented vegetable production was relatively new, but reported to be growing with the presence of a good demand for the produce in the respective local markets, in both the cases.

On the other hand, Janakalyan and Triyasi Cooperatives were associated with established vegetable production pockets. Triyasi Cooperative had the largest catchment and the biggest volume of production of vegetables of all the case study cooperatives, followed by

Janakalyan cooperative. Production of Janakalyan and Triyasi Cooperatives' catchments would go to local markets as well as to distant markets after the collection in the collection centre managed by Triyasi Cooperative.

Market oriented vegetable production was the main economic opportunity to maintain livelihood of most of the farmers across the cases. Therefore, exploiting this opportunity with the support of collective action was apparently one of the main motivations of local farmers to form and join the cooperative.

#### iv) Collective Bargaining

Across the cases, participants were found to perceive the cooperative as one of the forms of farmers' organization to achieve collective bargaining. They were found to have decided to join the farmers network in the form of membership in the cooperatives because they frequently mentioned that they believed 'an individual farmer cannot do much' so they needed to form, and join, the cooperative to get benefit from group processes, and to enhance their scope for collective bargaining through attaining economies of scale, and also for better government services.

For the majority of participants, the cooperative was a means to exert pressure on the government agencies for better supports and services. They appeared to believe that they could enhance their bargaining power for the government supports and services only through being organized in the form of cooperative or FG. Additionally, members from Triyasi Cooperative perceived that they needed to be cooperative to enhance their bargaining ability for better prices and other transaction conditions with the buyers of their farm produce. Hence, the perceived advantage of cooperative in terms of gaining collective bargain rewards in availing extension and other government supports, and in ensuring better price and terms and condition of transaction was one of the motivations for the respective communities across the cases to build farmers' network in the form of cooperative.

#### v) Socio-cultural Factors

The cross-case analysis also showed various socio-cultural factors also played a role in the decision of rural farmers to join the network. A fair portion of participants across the cases was found to have followed advice or call from close friends, relatives and local extension agents or other locally operated community development workers while deciding to join the

cooperatives. Likewise, some participants were found to have just followed others in relation to joining the cooperatives, without acquiring related information or delving much into the future implication of membership. Moreover, migration was another factor associated with this driver in one of the cases. In case of Mirmire Cooperative, a network of the population who had migrated to the area was formed, to deal collectively with livelihood and other social matters affecting these people who were initially not familiar with locals.

The cross-case analysis showed that out of the five drivers, poverty and livelihood, government policy and economic opportunity drivers were dominant over the other drivers as they captured most of the themes as well. These drivers also represented a major chunk of the pertinent data. However, the analysis suggests that government policy was an overriding driver. The government policy driver mainly represented collective motivation of local communities to form a farmers' network in the form of a cooperative in order to tap resources governed by the policy. This driver was found to influence other drivers in one way or another. For example, poverty and livelihood driver was associated with farmers' motivations such as accessing free extension and other government supports, unspecified potential benefits of cooperative membership, and access to credit. Of these motivations, except access to credit, other motivations were influenced by the policy of supporting farmers through cooperatives. Similarly, the economic opportunity driver was about exploiting existing potentials of market oriented vegetable production. However, it was found that this driver was also found influenced by the government policy of providing diverse supports to the farmers for market oriented vegetable production. In addition, the collective bargaining driver was also associated more with farmers' motivation to access government funding and lobby the government institutions for more supports to their community. In other words, cross-case analysis has suggested the government policy as the overriding driver as other drivers were associated with, and influenced by, this driver.

### **5.1.2 Summary and Conclusion**

This section presented cross-case analysis of triggers and drivers of social capital building. Development intervention in terms of extension and funding supports to the local farming community, and local stimuli generated by natural disaster and local leader farmer's initiatives triggered social capital building by prompting the local farmers join hands for collective action and eventually setting up of rural agricultural cooperatives. However, development interventions and related supports were critical in triggering the social capital

building in the rural farming communities. Such interventions either triggered the social capital building process, or bolstered the process in the aftermath of trigger.

On the other hand, drivers supported the social capital building process by providing rationale and motivation for the farmers to form and join the cooperative. Such rationales were applicable to both individual as well as collective levels. The analysis has revealed poverty and livelihood, government policy and economic opportunity were main drivers. However, cross-case analysis has suggested the government policy (of supporting the farm sector) as the overriding driver. Other drivers were found to be associated with or influenced by this driver. In conclusion, government policy of group or cooperative based extension service and supporting the agricultural cooperatives critically helped in triggering the building of social capital. Likewise, this policy also served as the main driver of social capital building by prompting local communities establishing the cooperatives and local farmers joining them. The next section will outline the mechanism of social capital building within the framework of cooperatives.

## **5.2 Mechanisms of Social Capital Building within the Framework of Cooperatives**

The previous section presented the way the process of social capital building was triggered and described the major drivers of social capital building based on the cross-case analysis. Triggers and drivers set the foundation of social capital building by prompting the formation of cooperatives and the local farmers joining them. This study has argued that structure and function of cooperatives provide various mechanisms of building of social capital. This section presents a classification of mechanisms as revealed by cross-case analysis and highlights major such mechanisms available within the framework of case study cooperatives. It will also document the supporting informal mechanisms beyond the cooperatives.

### **5.2.1 Classification of Mechanisms**

Cross-case analysis revealed that mechanisms of social capital building across the cases could be classified on number of bases. Major bases of classification that analysis revealed were regularity, boundary, scope and frequency. Table 5.3 highlights major classifications, types and some major mechanisms of building of social capital under each type of mechanism.

**Table 5.3: Classification of Mechanisms of Social Capital Building across the Cases**

<b>Basis of classification</b>	<b>types</b>	<b>Major mechanisms</b>
Regularity	Regular	Monthly cooperative meeting, selling of vegetables through collection centre
	<i>Ad hoc</i>	<i>Ad hoc</i> meeting, members' visit of the cooperative office, visit of government officials and extension staffs to the cooperative
Boundary	Within the cooperative	Monthly cooperative meeting, members' visit of the cooperative office, use of cooperative shop by members and selling of vegetables through collection centre
	Beyond the cooperative	Participation in training and tours, meetings in leisure and in stroll, socio-cultural occasions, labour exchange
Scope	Formal	Monthly and <i>Ad hoc</i> cooperative meeting, and participation in training and tours
	Informal	Meeting in leisure and in stroll, socio-cultural occasions, labor exchange
Frequency of occurrence	High	Monthly cooperative meeting, selling of vegetables through collection centre
	Low	Visit of government officials and extension staffs to the cooperative, Participation in training and tours

The cross-case analysis showed that all the case study cooperatives housed all the different types of mechanisms presented in the Table 5.3.

### **5.2.2 Major Mechanisms of Social Capital Building and Their Functioning within the Cooperative**

Case studies explored ten different mechanisms within the structure and function of cooperative which facilitated the building of social capital for actors across the cases. The cross-case analysis revealed that such mechanisms could be grouped into five categories as presented in Table 5.4, by merging the related themes that emerged from the case studies. Monthly meetings and *ad hoc* meetings were merged into new *cooperative meeting* theme. Likewise, members' visits to the cooperative office, and use of the cooperative shop were merged into single theme *members' visit of the cooperative*. Similarly, participation in a cooperative managed demonstration farm was merged into *participation in training and extension activities*. Finally, cooperative office and farm visits by GO/NGO support agencies, cooperative and production pocket visits by other visitors and members, and visits by executives to support agencies could be combined to generate the new theme *exchange of visits*. However, *selling vegetables through collection centre* was treated as a separate and



independent theme as it captured a major fraction of relevant data entries from one of the cases and did not fit closely with other themes generated.

**Table 5.4: Main Mechanisms of Social Capital Building in Case Study Cooperatives**

<b>Mechanisms or group of mechanisms</b>	<b>Parties involved</b>	<b>Cases evident</b>	<b>Form of social capital expected to be built</b>
Cooperative meeting	Members and executives	Mirmire, Janakalyan and Khapaudi Cooperatives	Bonding
Members' visit of the cooperative	Members and executives	Mirmire, Janakalyan and Triyasi Cooperatives	Bonding
Selling of vegetables through collection centre	Members, non-members, traders, cooperative staffs	Janakalyan and Triyasi Cooperatives	Bonding, bridging
Participation in Training and extension activities	Members, executives, other Farmers and extension agents	All cases	Bonding, bridging and linking
Exchange of visits	Members and executives, and visiting officials from support agencies	All cases	linking

### 5.2.2.1 Cooperative Meeting

Cross-case analysis revealed that cooperative meeting was the most common mechanism of social capital building in three out of four cases. The word cloud, drawn from NVivo report (QSR 2012), of mechanisms of interaction between various actors within the framework of case study cooperatives shows meeting by far the most prominent and dominant word. Cooperatives meetings were held on regular as well as *ad hoc* basis.



**Figure 5.2: Word Cloud of Mechanisms of Social Capital Building in Case Study Cooperatives**

Among the different types of meetings, monthly meetings were the most common and the most frequently mentioned mechanism by most of the participants in all case study cooperatives except in Triyasi Cooperative, in which there was no practice of holding a monthly meeting dedicated to collecting and utilizing savings. This cooperative offered a limited banking service so holding a monthly meeting to collect and mobilize saving was arguably not necessary. Moreover, given its relatively large membership size, it would not have been practical to hold monthly meetings as well.

Although the main purpose of the monthly meeting was to collect monthly saving deposit from the members and mobilize the same through lending to the members, such meetings, however, also generally discussed agendas of various cooperative affairs and took necessary decisions. The meetings which were of full membership also provided opportunities for members to engage in interaction and sharing of ideas and information of mutual interest with

each other. They usually had a discussion on pertinent farming and marketing related issues, matters related to local community development, local and national politics, and even household related matters. Engaging in such interactions, deliberations, and sharing of ideas and information helped to build and reinforce network with fellow members and develop norms of reciprocity and trust among them. The analysis also showed *ad hoc* meetings were in practice in these cooperatives. *Ad hoc* meetings were organized as and when necessary to discuss urgent business and make decisions accordingly. Such meetings would be less effective than the monthly meeting in building and reinforcing the social capital as the meeting would normally last for a relatively short time with fewer members participating, rendering less opportunity for sharing and interaction among the members.

#### **5.2.2.2 Members' Visit of the Cooperative**

Visit to the cooperative was another common mechanism of networking and interaction among members, and between members and cooperative executives across the cases. However, case study cooperatives differed in this mechanism and could be grouped into two ways: opening of cooperative office on a daily basis; or on the meeting day only. In the case of Triyasi Cooperative the cooperative office opened every day and members visited the cooperative to borrow or repay their loans and to buy farm inputs. They met other fellow members arriving for the similar services. When the members met each other they would chat and share ideas and information on contemporary farming and marketing related matters. They might also meet and interact with board members as well as employees. Such interactions between the members helped them become more familiar with each other and build and reinforce the bonding ties among them. Also, repeated visits and interaction with the cooperative employees further helped to build and reinforce bonding social capital.

On the other hand, the other three cooperative offices were normally found opened on the day of the monthly meeting or when an *ad hoc* meeting was called. Besides the monthly meeting there was a practice that board members and other general members living nearby the cooperative office usually gathered in the office for informal chats and discussion (observed in Janakalyan Cooperative and Mirmire Cooperative) and for managing book keeping records (observed in Mirmire Cooperative). In their informal gatherings members would usually discuss with the chairman and other members of the cooperative management board about concerns and ask for necessary decisions or action. They also exchanged personal ideas and feelings on various matters which would help in building and reinforcing of bonding ties

among them.

The analysis shows that the main difference in this mechanism between the two groups of cooperatives: i) office opened daily and ii) on the meeting day only, was that in the former case possibility of meeting and interaction with other stakeholders outside the cooperative's membership was possible, enhancing the opportunities to build bridging and linking social capital. In the latter case, interaction was limited among the members and executives only, rendering the reinforcement of bonding social capital.

#### ***5.2.2.3 Selling Vegetables through the Collection Centre***

Cross-case analysis showed this mechanism was available in two of the four case study cooperatives, namely Triyasi and Janakalyan Cooperatives, which were bigger than the rest in terms of scale of operation and size of membership. Local farmers from the catchment of these cooperatives were found to be selling their produce, mainly vegetables, through the local collection centre run by Triyasi Cooperative that opened every day and served as the main forum of contacts for the members of Triyasi Cooperative.

Members usually spent hours in the collection centre on a regular basis during the main harvesting season. They had an opportunity to chat with other farmers during handling of vegetables and waiting for the traders to come to clear the stock. Members and non-member farmers would make new friends, and renew interpersonal ties with fellow members and other non-member farmers, when they exchanged ideas and information on various aspects of farming and marketing. Although, members of Janakalyan Cooperative also supplied vegetables to this collection centre the monthly meeting was the main mechanism of social capital building for them.

#### ***5.2.2.4 Participation in Extension and Training Programs***

Cross-case analysis showed that interaction among the members also took place when they participated in various extension activities including farmers' training, farmers' tours and demonstrations of assorted farm technologies and practices in their farm fields. Such activities were mainly organized by the DADO. Through participation in local level farmers' training and demonstration, member farmers had an opportunity to build and strengthen the bonding ties with fellow members and interact with them, focussing on topics of mutual interest. They also had an opportunity to build networks with farmers from other locations,

and with more agriculture technicians and officials, during their participation in specialized advanced training organized outside the village, or even went on district and inter district tours.

Integrated Pest Management (IPM) Farmer Field School (FFS) was found to have served as an important mechanism of social capital building in two of the four case study cooperatives preceding the cooperative formation, although this was not a regular mechanism. Although the main objective of the IPM FFS was to empower farmers for management of crops and pests in an integrated manner, and make judicious use of pesticides, it served as a crucial platform for interaction and subsequent building or reinforcement of social capital in Janakalyan and Khapaudi Cooperatives.

Likewise, Mirmire Cooperative maintained a demonstration plot on leased land in which it carried out various farming technology related trials and demonstrations. All members were required to contribute labour and other materials for the production activities in the plot. Participation by members in planting to harvesting operations in the demonstration was an important mechanism for members to network and interact. When they met in the farm they exchanged farming ideas and information and also could learn from the more experienced members while they worked in the farm.

The analysis has shown that participation in training and other extension activities is not a regular phenomenon. Therefore, this mechanism can be expected to be less effective than other regular and frequently occurring mechanisms in building of social capital. Moreover, although these were not regular mechanisms, IPM FFS and technology demonstration plot was found to have been highly effective in building bonding social capital. It also served an important mechanism to build linking social capital.

#### ***5.2.2.5 Exchange of Visits between the Cooperative Executives and Officials from Service Providing Agencies***

A few other mechanisms of building of social capital, especially linking social capital, were found in all the cases, *albeit* at varied levels. Visits by external support agencies, mainly DADO, to the cooperative office and farm was one form of mechanism. Technical and other officials from DADO were among those who made regular visits to the cooperatives and fields. They were found to visit mainly in the course of monitoring on-going extension and other support activities in the cooperative. In some cases, such officials might also visit the

cooperative office just for a courtesy call. Such visits were observed more frequently in Triyasi Cooperative. Possible reasons could be the relatively large scale of operation and successful performance of the cooperative; the cooperative office located in highly accessible location; and pre-existing linkage between the local farmers of the production pocket and support agencies. Cooperative executives and members were also found in return to visit to such agencies, located in district headquarters, with their demands or in the process of negotiating funding for small scale community projects.

Individual members also visited support agencies, mainly seeking extension required at the personal level. Exchange of such visits was found helpful in building and strengthening linking social capital of cooperatives and their members. Occasionally, teams of farmers and entrepreneurs from outside the village, or even beyond the district, visited the cooperative and the production pocket. Such visits were more frequent in the case of Triyasi Cooperative given the reasons mentioned before. The analysis has indicated that exchange of such visits built and reinforced linking social capital. One inference that can be drawn from the analysis is that such visits were more frequent with the comparatively bigger and more successful cooperatives, which were also easily accessible.

The analysis also revealed an absence of any clear pattern about the types of mechanisms across the cases except 'within the cooperative' mechanism (Table 5.3). The analysis showed the most common mechanisms of social capital building across the cases fell under 'within the cooperative' type. Therefore, it can be said that major mechanisms of social capital building in case study cooperatives were present within the cooperative boundary and facilitated the building of bonding social capital.

### **5.2.3 Informal Mechanisms beyond the Cooperative**

Cross-case analysis revealed that a number of informal forums or occasions present beyond the cooperative supporting the building of social capital. Informal chatting with fellow villagers in leisure times or while strolling in the village was a common occasion for interaction among members. Significantly, members met each other at social or cultural events like marriages or observing rituals of religious homage. Likewise, members and non-members also met in the course of informal labour exchange during planting and harvesting time and other crop management activities of vegetables and major cereal crops. Members met together when any of their standing crops suffered problems like pest infestation. Female

members also met up with each other collecting water. In all such informal meetings, besides discussing contemporary farming and marketing related issues, members usually shared their feelings and information about a multitude of topics. Such forums were present more in Mirmire and Khapaudi Cooperatives, each with a relatively small number of members, all living in close proximity of each other.

The cross-case analysis also showed that such informal meetings between the members and local socio-cultural occasions helped expand the effectiveness of social capital building mechanisms present within the cooperatives. Many interacting parties shared common views and understanding while using mechanisms present within the cooperative. Moreover, mechanisms within the cooperative, in turn, were also found to have enhanced the extent and quality of informal mechanisms prevailed in the community by allowing more opportunities for contacts among member and non-member villagers. Hence, it can be concluded that mechanisms within and beyond the cooperative complemented and reinforced each other.

#### **5.2.4 Summary and Conclusion**

This section provided an overview of major mechanisms of social capital building within the case study cooperatives. It has shown that across the cases more mechanisms facilitating the building of bonding social capital were present than the mechanisms facilitating other two types of social capital. Among the various mechanisms, participation of the members in a monthly meeting was the main mechanism of social capital building in comparatively smaller cooperatives, whereas selling vegetables through collection centre was the main mechanism in the case of bigger cooperatives having collection centre facilities. Moreover, some informal forums beyond the cooperative helped in enhancing effectiveness of mechanisms of social capital building within the cooperatives. These various mechanisms provided various opportunities for networking and developing interpersonal relationship between and among different actors, based on norms of reciprocity and trust. Next, section 5.3 will highlight crucial factors which supported the social capital building process.

#### **5.3 Enabling factors of social capital building**

This section presents cross-case analysis of factors that provided crucial support in the social capital building process. Cross-case analysis showed various people and institutions, as well as socio-cultural and physical factors, had provided an enabling environment for the social

capital building to take place. Such factors mainly enhanced the effectiveness of social capital building mechanisms.

### **5.3.1 Leadership**

Cross-case analysis showed how the leadership of a local leader farmer provided a critical mainstay in the building process of social capital, across the cases. These leaders either led or played an active role in cooperative formation. In post cooperative formation phase these leaders played an essential role in cultivating unity among members by presenting themselves as a role model for the members. In Janakalyan and Khapaudi Cooperatives the main leadership i.e. chairman was found to have carried out a crucial role in building bonding social capital through organizing local farmers, striving for their wellbeing, and thus infusing the sense of ownership and unity among the members of the respective cooperatives. A good response by board members and other general members also contributed to that end. As pointed out above, in Triyasi Cooperative a seasoned local politician was chosen as the leader by the local farmers because of his good stock of linking social capital, which could be used in funneling outside resources into the cooperatives for the members' wellbeing.

Their hardworking nature and dedicated approach towards the betterment of the cooperative apparently helped in cultivating unity among members and also attracted the members towards the cooperatives. They also managed to draw more outside supports into the cooperative which helped in building members' loyalty toward the cooperatives and creating and strengthening bonding ties among themselves. They were even found to be involved in teaching fellow farmers various aspects of farming and even providing advices on even household related matters. In sum, local farmers' leadership provided crucial support in social capital building by playing active role in cooperative formation and later acting as a role model in cultivating unity and norms of reciprocity among members, and also playing a role of mentoring and problem solvers.

### **5.3.2 External Support**

#### ***Extension Agency and Agents***

Findings also showed the crucial role of DADO and its officials and field based extension agents in social capital building. DADO apparently helped trigger social capital in two cases whereas in the rest it helped steer the effects of triggers, to foster the social capital building



process, through extension intervention and funding to assist farming and marketing. Both the support activities brought the local villagers into one place, allowing interaction among them. The DADO also facilitated the process of forming and registering the local agriculture cooperative in the community in order to help them access government resources. Moreover, the local extension agent was found instrumental in building social capital in one of the cases, by encouraging local farmers to organize a cooperative, and start vegetable farming in the aftermath of natural disasters. Thus, the local extension agency and agents provided crucial support in social capital building by helping in triggering of building process as well and by providing necessary technical and logistic supports in the aftermath of trigger.

### **5.3.3 Socio-economic Factors**

#### ***5.3.3.1 Similar Socio-economic Situation***

Similar socio-economic condition of members was also found to have contributed to social capital building. A majority of the general members and the board members and employees in all the case study cooperatives were dedicated farmers. Moreover, most of them were small farmers in terms of land holding and scale of farm enterprise operations.. Similar socio-economic condition of the members made it easier for such farmers to combine to fulfill common needs and solve common problems which also provided the basis for the building and utilization of social capital by expanding the scope of mutually beneficial interaction among them.

#### ***5.3.3.2 Pre-existing Social Groups and Social Capital***

Pre-existing social groups also came in to play to further the social capital building process. Some of members were previously the members in the local youth club, mothers' club and traditional self-help group before joining the cooperatives. Members who had prior knowledge and experience of working in a group might have brought such experiences to the cooperative lubricating interaction among the members. Moreover, limited networks developed among the farmers though such forums would be renewed after their joining the cooperative.

Likewise, pre-existing linking contacts, mainly of the main leadership, was found to have positively influenced the process through attracting various external supports to the respective cooperatives which consequently supported in building and reinforcing of bonding

social capital. Pre-existing linking contacts of the leadership would bring more supports to the cooperative that helped in members' motivation to be more loyal to the cooperative. This applied more to the chairman of Triyasi Cooperative who had developed a number of linking contacts before becoming the chairman. Correspondingly, almost all member households in Khapaudi Cooperative were descended from the same uphill village some 30 years ago. Therefore, the village possessed a good stock of pre-existing bonding social capital before the formation of the cooperative. Thus, pre-existing social groups and social capital helped in revitalizing, augmenting, or reinforcing the social capital by expediting the process of interaction.

#### ***5.3.3.3 Migration***

Likewise, internal migration and associated economic desperation had also seemingly contributed towards the building of social capital in one of the cases. The majority of the members of Mirmire cooperative had settled there from nearby and distant villages in search of better opportunities. Migration forced by poverty and economic stress gave an impetus for such migrant villagers to get organized in a bid to fight hunger and destitution through ultimately building and using social capital.

### **5.3.4 Physical Factors**

#### ***5.4.4.1 Physical Proximity***

Physical proximity among prospective members was also found to have contributed in building and further augmenting or reinforcing the social capital. In Janakalyan and Khapaudi Cooperatives, a majority of the members were from the same respective villages and resided in close proximity. Living in close proximity facilitated more frequent interaction among members and the resultant building or reinforcing of their bonding social capital. Likewise, proximity to service providing government agencies, mainly local DADO, was found to have impacted in building of linking social capital by rendering more frequent exchange of visits possible between them.

#### ***5.4.4.2 Accessibility***

Moreover, cooperative headquarters and production pockets with good accessibility also seemed to have positively influenced the social capital development process by providing

more opportunities for meeting and interaction between local farmers and staffs of such agencies.

### 5.3.5 Summary and Conclusion

The cross-case analysis showed positive influence of some socio-economic, leadership and physical factors in social capital building. Of such factors, local leadership was found to be the main factor because the leadership played a critical role in the social capital building process, either by causing it to trigger, or by providing crucial supports in the process. Another enabling factor was role of the extension agency or DADO. DADO too, either helped in triggering the social capital building process or supported it variously. Physical factors in terms of proximity and accessible location also lent valuable support. The next section outlines manifestation of the changes in social capital..

### 5.4 Manifestation of Change in Social Capital

This section presents the changes in various aspects of social capital with the development of case study cooperatives. Different forms of social capital built or reinforced through the mechanisms discussed in Section 5.2 was evident across the cases. The manifestation of change in bonding, bridging, and linking social capital after the formation of each of the case study cooperatives is presented based on the qualitative assessment. Table 5.5 shows the changes in social capital related parameters across the case study cooperatives.

**Table 5.5: Change or Development in Social Capital Related Parameters across the Cases**

<b>Positive change or development in social capital</b>	<b>Cases evident</b>
<b>Bonding (Group)</b>	
<ul style="list-style-type: none"> <li>shared sense of unity among the members</li> <li>general sense of ownership about cooperative</li> <li>general absence of major differences and conflict,</li> <li>general absence of discriminatory practice and biasness</li> <li>we feeling of members and executives</li> <li>no divisions based on political beliefs</li> <li>general absence of arrogance and domination of certain members or group</li> </ul>	<ul style="list-style-type: none"> <li>All cases</li> </ul>
<b>Bonding (individual)</b>	
<ul style="list-style-type: none"> <li><i>Network</i> <ul style="list-style-type: none"> <li>(limited) new ties created</li> <li>existing ties strengthened/reinforced</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Mirmire and Triyasi Cooperatives</li> <li>All cases</li> </ul>

<ul style="list-style-type: none"> <li>• <b>Norms of reciprocity and cooperation</b> <ul style="list-style-type: none"> <li>• cooperative attitude and behavior</li> <li>• confidence in garnering emergencies support</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• Mirmire and Triyasi Cooperatives</li> <li>• Mirmire and Khapaudi Cooperatives</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Trust</b> <ul style="list-style-type: none"> <li>• trust in leadership and fellow members</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• All cases</li> </ul>
<b>Bridging (Institutional level)</b>		
<ul style="list-style-type: none"> <li>• (limited) new bridging contacts established</li> </ul>		<ul style="list-style-type: none"> <li>• All cases, but Triyasi Cooperatives better than other cases</li> </ul>
<b>Bridging (Individual level)</b>		
<ul style="list-style-type: none"> <li>• (limited) new bridging contacts created</li> </ul>		<ul style="list-style-type: none"> <li>• All cases, but Triyasi Cooperatives better than other cases</li> </ul>
<b>Linking (Organizational)</b>		
<ul style="list-style-type: none"> <li>• new linkage built</li> <li>• frequency of visits to the cooperatives by service providing agencies (mainly local DADO) increased</li> </ul>		<ul style="list-style-type: none"> <li>• Mirmire, Janakalyan, and Khapaudi Cooperatives</li> <li>• All cases</li> </ul>
<b>Linking (Individual)</b>		
<ul style="list-style-type: none"> <li>• (limited) new linkage created</li> </ul>		<ul style="list-style-type: none"> <li>• All cases</li> </ul>

### 5.4.1 Bonding Social Capital

Cross-case analysis showed that bonding social capital across the cases was manifested at individual member level as well as group level. The term ‘group bonding social capital’ was used in the case study to represent the bonding social capital at the group or collective level. Bonding social capital at an individual level was seen to be expressed in terms of networks, trust and norms of reciprocity.

#### 5.4.1.1 Group Bonding Social Capital

The cross-case analysis showed that among the members there was a positive change in group bonding social capital across all the cases. Some of the major themes across the cases are given in Table 5.3. However, the analysis revealed that the shared sense of unity was an overriding theme as it was the most recurrent theme and captured a large portion of pertinent data. It also represented an essence of all themes as all the remaining themes were found associated with, and directed towards, this theme.

The analysis showed that the unity among the members increased after they joined the cooperative and started to be involved in cooperative business and affairs together with fellow members. A general sense of ownership of the respective cooperatives by members

and executives was also found. Members would normally say they loved their cooperatives and were striving for the betterment of the cooperative because the cooperatives had given them various benefits. Also, members across the cases were found to be identifying themselves as being associated with the respective cooperatives or production pocket, more so in case of Triyasi and Janakalyan Cooperatives. Both the cases represented established and well known vegetable production pockets. Some members of these cooperatives took great pride in them and aspired to maintain the goodwill or reputation of the cooperative or, for that matter, of the village.

Likewise, in all the cases most of the participants believed that there were no major differences and internal conflict among members and executives. Participatory decision making and maintaining transparency were found to play a crucial role for the reported absence of internal conflict and general feeling of ownership towards the cooperatives. This also played a vital role in cultivating and maintaining trust of members in the leadership and cooperative management. Similarly, no discrimination or bias by the cooperative management or executives against any social or economic groups was reported. No destructive power play was obvious in the cooperatives either. Consciousness of the potential downfall of cooperatives in case of internal division and other internal issues was found the main reason for the general absence of these factors. In sum, increased perceived unity among members and executives represented the main development in the group bonding social capital.

#### ***5.4.1.2 Network***

Creating new ties and reinforcing existing ties among members were changes related to networks in all the cases. In general, reinforcement or strengthening of existing bonding ties between the members was found more prominent than the creation of new ties among the members. In all the cases, the cooperative was formed drawing membership mainly from local villagers, who were mostly known to each other. Therefore, in most of the cases, some pre-existing social capital existed. Moreover, the building of social capital had also been already started before the formation of respective cooperatives by virtue of triggers as discussed in Section 5.1.1.1. After the formation of a cooperative various mechanisms discussed in Section 5.2 facilitated reinforcement of these contacts or ties based on the norms of reciprocity and trust.

However, new contacts or ties were found to have built to some extent in case of Mirmire Cooperative and only a little in Triyasi Cooperative. As most of the members in Mirmire Cooperatives had migrated from different places, some of the members created new ties with fellow members after joining the cooperative. Likewise, in Triyasi Cooperative, initially local villagers became the members in the cooperative and later new members from adjacent villages also joined the cooperative so the expansion of the membership created new networks among the members. Hence, mainly previously existing bonding ties among members were renewed and reinforced after they joined the cooperatives, with limited development of new bonding ties between the members who were not familiar before joining the cooperative.

#### ***5.4.1.3 Norms of Reciprocity and Cooperation***

The cross-case analysis revealed increased norms of reciprocity and cooperation among the members. Members were helping fellow members variously in farming and marketing activities. They shared ideas and information on farm technology and marketing. They also extended help in meeting cash needs of fellow members by either recommending them for cooperative borrowing or providing petty cash lending to them. Members also shared among them farm source materials such as seeds and seedlings. Before joining the cooperative they would generally not be bothered about such norms. However, after joining the cooperatives they started taking care of the welfare of fellow members, guided by the norms of reciprocity and cooperation.

The tendency to help out fellow members, when organizing social and cultural functions and rituals, and to provide physical and emotional support in case of emergency increased. Likewise, the practice of offering or exchanging labour in farming operations had also increased. Changes in both attributes were more frequent in Mirmire and Khapaudi Cooperatives. Some common features shared by these two cooperatives were found responsible for this contrast to the other cases. Both the cooperatives had relatively small membership, facilitating dense interaction, fast communication, and easier exchange of information and labour among themselves. Likewise, members in both the cooperatives had either migrated into the location, or had descended from the same highland village which might have prompted them to act collectively in order to explore, and capitalize on, better livelihood opportunities in new environments. These cooperatives also held regular monthly meetings which facilitated frequent and regular communication and interaction among

members which might also have helped in reinforcing the norms of reciprocity and cooperation. Moreover, the leadership's role in developing such norms among the members was a key in these cases. Some personal qualities of the chairman, including teaching and mentoring fellow members, demonstration of helping attitudes and behaviour, and reaching out to members in need, might have helped in infusing such norms among the members.

In the case of Janakalyan and Triyasi Cooperatives, possibly due to relatively extensive membership with members scattered over a wide area, even more so with Triyasi Cooperative, less development in the norms of reciprocity was found than in the previous two cooperatives. Nevertheless, such norms of reciprocity did prevail among the inhabitants of same settlements, or villages within the catchments of these cooperatives. In conclusion, increased norms of reciprocity in terms of cooperative attitude and behaviour were observed more in the cooperatives with relatively small size of membership which also held regular monthly meetings, and where most of the members had migrated into the location in search of better livelihood opportunities. Moreover, supportive leadership qualities also helped in such increased norms of reciprocity within the cooperatives.

#### ***5.4.1.4 Trust***

There was a development in trusting relationships or increase in trust among the members, and between the members and the cooperative executives. The chairman and the board members were generally trusted by the members across the cases. The chairmen were more trusted than rest of the board members. However, in most of cases the trust was more attributed to financial matters. Members were trusted by fellow members because none of them had been involved in financial irregularities or defaulting. A minor tendency of members trusting fellow members and the leadership because of feelings of security and confidence of being helped out in emergency was also reported. Moreover, trust of the leadership was found contingent on the level of delivery by the leadership, in terms of the extent that the leadership was able to live up to members' expectations by striving for the wellbeing of the latter, and being trustworthy at the same time.

The cross-case examination also revealed some kind of mistrust among the members and executives in all the case study cooperatives. A very small fraction of members were not happy with the way the cooperatives were run. Such participants mainly criticized the cooperative leadership and management for the lack of transparency in financial matters and

other cooperative affairs because they had not been involved in decision making process. They were also sceptical about the support received by the cooperative from outside and equitable distribution of such support among the members. In summary, although some minor tendency to mistrust existed, largely there was positive development of trust related aspects. However, trust was mainly attributed to the financial matters: members' timely repayment of loan and maintaining financial transparency by the cooperative management. Similarly, level of delivery, honesty and trustworthy behaviour of the chairman also influenced the level of trust.

#### **5.4.2 Bridging Social Capital**

In general, building or reinforcing of bridging social capital, within the framework of the cooperative, across the cases was found relatively poor both at the institutional and individual levels. In general, only limited cooperation and collaboration of case study cooperatives with other similar type of cooperatives was found. In the case of Triyasi Cooperative building of bridging social capital to some extent was reported as it engaged with other nearby cooperatives in dialogue and collective efforts in dealing with various farming and marketing related issues faced by the farmers. Moreover, it also assisted in marketing of vegetables produced by the farmers associated with two smaller nearby agricultural cooperatives by allowing them to use its collection centre facility. Such cooperation and collaboration was virtually non-existent in the case of other cooperatives barring some informal contacts between them. Similarly, poor contact of these cooperatives with their higher ordered representative bodies was found. Although all of them were the members of District Cooperatives Union, their relationship with the union was merely a formal arrangement with only a little practical significance.

Like at the institutional level, only a limited development of networks at individual level was found across the cases. Even when such networks were developed, the distribution was not uniform as some more active and alert members developed more bridging networks and contacts. Such contacts were found to have developed mainly through members engaging in marketing their farm products, on either a retail or wholesaling basis, through the collection centre and were more evident in the case of Triyasi Cooperative.

Hence, the conclusion is that there was a poor development of bridging social capital both at institutional as well individual levels. Poor development of bridging social capital appeared



also due to the fact that other primary cooperatives and higher order representative cooperative bodies were not very well developed.

### **5.4.3 Linking Social Capital**

Cross-case analysis showed a substantial growth in linking social capital in terms of linkage established by the respective cooperatives as well as their members with external support agencies. However, the change or level of development of linking social capital varied across the cases.

#### ***5.4.3.1 Institutional Linking Social Capital***

Two main changes at the institutional level were new linkages established, and increase in frequency of contacts, between the cooperatives and service providing agencies. While growth in institutional linking social capital was found to be moderate in case of Mirmire and Khapaudi Cooperatives, it was relatively high in Janakalyan and Triyasi Cooperatives. The latter two cooperatives had developed more linking contacts, with the local DADO to be the main contact, than the former two.

Observed similarity and difference in the level of change in the linking social capital at the institutional level were found to have been influenced by some underlying case specific features and contextual similarities and differences among the cases. The catchments of Triyasi and Janakalyan Cooperatives were renowned vegetable production pockets, so had attracted external support agencies including local DADO which facilitated network building. Local farmers had prior exposure to extension support and related development agencies even before the formation of the respective cooperatives. Further, in the case of Triyasi Cooperative, the chairman possessed a good stock of pre-existing linking social capital and political power which had huge impact on the level of the resources tapped by this cooperative. Being a political figure he had built many linkages from local to central level government agencies and donors and therefore had an outstanding capacity to access various resources from such agencies and bring them into the cooperative.

Besides, some personal qualities of the chairman had also seemingly influenced the extent and quality of linking social capital and associated resource tapping. Some of such observed qualities were activeness, hardworking nature, and being willing to spend own money in accomplishing cooperative affairs. Moreover, the production pockets and the cooperative

headquarters of Triyasi Cooperative were located at physical proximity to the service providing government and non-government agencies based in district headquarters. They were also located in highly accessible areas on the highway which had facilitated visits from service providing agencies and increased interaction between their staff, the leadership, and members of the cooperative. Moreover, at Janakalyan Cooperative the chairman and some board members were made continuous and coordinated efforts in approaching service providing agencies seeking various forms of support.

Comparatively lower level of linking social capital for Mirmire and Khapaudi Cooperatives may be attributed partly to the relatively short history of commercial vegetable production and marketing in the catchments of these cooperatives. Catchments of Mirmire and Khapaudi Cooperatives were only emerging vegetable production pockets and before the formation of respective cooperatives no substantial links of farmers from these areas had been previously established with service providing agencies. Moreover, despite the physical proximity with such agencies, Khapaudi Cooperative was found to have managed only a few linkages with these agencies. It was found that local farmers had just started commercial vegetable farming and most of them had relatively small scale operations. Besides, most of the members were female, and not proactively involved in approaching external agencies and building social capital. In sum, findings showed substantial change in institutional linking social capital apparent in the comparatively bigger cooperatives representing established production pockets with prior exposure of local farmers to support agencies. These were able to build a comparatively higher stock of linking social capital than the smaller cooperatives with relatively new production pockets. Moreover, physical accessibility and a hardworking and dynamic cooperative leader with pre-existing linking social capital also positively influenced the level of change in institutional linking social capital.

#### ***5.4.3.2 Individual Linking Social Capital***

Significant changes in linking social capital at individual level were found for some of the board members and general members in all the cases. They had established the linkage with the officials and staff members of service providing government agencies including DADO and other government and non-government agencies by virtue of cooperative membership. Such linkages were initially built in their repeated visits to such agencies in the course of cooperative affairs. This social capital was further strengthened through the repeated visits of the officials and staffs to the respective cooperatives.

The change in linking social capital for the members of Triyasi Cooperative was the biggest of all followed by members of Janakalyan Cooperative. The change was comparatively smaller for the members of Mirmire and Khapaudi Cooperatives. The biggest change in building of linking social capital in Triyasi Cooperative can be attributed to more opportunity for the members to meet and interact with external support agencies representatives. Due to strategic location of the cooperative in terms of easy accessibility and established commercial vegetable production pocket there were frequent visits of outsiders to the cooperative office and member farmers' fields. Also, successful performance of the cooperative attracted the outsiders. Likewise, Janakalyan Cooperative also represented an established, mainly tomato, production pocket which had been able to attract service providing agencies and other visitors to the production pocket. Linking social capital of the members had been developed through such visits and their participation in consultation and interaction with visiting officials and other donors. Moreover, linking social capital built at cooperative level had also influenced the building of this form of social capital at the individual level as individual members had gained more opportunities to build networks with the external service providers during exchange of visits, and interaction at organizational level.

Further, a relatively low level of development of linking social capital at the individual member level for Mirmire and Khapaudi Cooperatives may be attributed to the knowledge and capacity of general members about how to build social capital. Many members were not well educated and they did not have much connection with the outside world. Also, links to external support agencies were generally established at institutional or cooperative level so, barring the cooperative leadership and a few active and more knowledgeable members, many other members did not have any ideas about the possibility of building this type of social capital.

In conclusion, although substantial change in linking social capital at individual members' level was found, it varied across the cases as well as among the members within the same cooperative. In general, the change at individual level corresponded to the change in institutional level with members from bigger cooperatives, which also represented established vegetable production pockets and more accessible location managed to build and accumulate this capital more. Besides institutional factors, personal factors such as activeness and related

knowledge and prior exposure positively influenced the change in the level of this social capital at individual level.

#### **5.4.4 Summary and Conclusion**

This section presented cross-case analysis on manifestation of changes in different forms of social capital built within the framework of case study cooperatives. A significant change in social capital, mainly bonding and linking, was found in all the cases *albeit* at varied levels. Positive change or development of group bonding social capital was manifested mainly in terms of unity among members. Change in individual bonding social capital was manifested mainly in terms of reinforcing of existing ties, and increased trust and norms of reciprocity between and among the members of the cooperatives. The analysis also showed that norms of reciprocity among members of the cooperative were higher in smaller cooperatives than the bigger ones. Likewise, trust placed by members in fellow members and the leadership was mainly attributed to financial transparency and lack of any past history of defaulting and fund embezzlement.

Development or change in bridging and linking social capital was found at institutional as well as individual levels, mainly in terms of development of bridging and linking networks. Change in linking social capital was found more at group level than in the individual level with high level of variation among the individual members. Linking social capital was higher for the cooperatives having renowned production pockets; prior exposure of their members to external support agencies; and production pockets and the cooperative headquarters in easily accessible places. Out of the three forms of social capital the change in bridging social capital across the cases was poorest of all, suggesting poor building of this social capital at individual as well as group levels. The next section outlines utilization of social capital by the members of the cooperative.

#### **5.5 Utilization and Impact of Social Capital**

This section presents the findings of cross-case analysis on utilization and impact of social capital built within the framework of the case study cooperatives. Bonding, bridging and linking social capital built within the framework of case study cooperatives was found to have been utilized variously at the individual member level for their livelihood improvement, and at organization or cooperative level, for collective benefits. This section also outlines the

major impacts of social capital in various aspects of rural livelihood. Cross-case analysis suggested a number of impacts of social capital at individual member, or household level by virtue of social capital. Likewise, various impacts were also evident at community level. The analysis revealed two types of impact of social capital. Firstly, there were obvious and direct impacts of bonding, bridging and linking social capitals at individual member or household level and community level. Secondly, mainly bonding social capital, with the support of linking social capital, was found to have played critical role in the performance of the case study cooperatives.

### **5.5.1 Utilization at the Individual Member Level**

Some major benefits or utilizations by the individual members were: accessing farm technology and information, labour exchange, produce marketing related supports, accessing credit and garnering emergency help.

#### ***5.5.1.1 Access to Farm Technology and Information***

Accessing farm technology and information was found to be the most prevalent type of utilization of bonding social capital. Mainly from fellow members, producers acquired various farming related technologies and information. The monthly cooperative meeting was found the main forum for the exchange of ideas and information pertinent to various new technologies and solving various crops management related issues, except in Triyasi Cooperative, where a regular monthly meeting of the cooperative was non-existent. Members would also exchange such ideas and information when they exchanged farm visits. This type of practice was more common among the members in case of Mirmire Cooperative. Members of this cooperative also learned various farming techniques through approaching the chairman who had farm technology competency at par with agriculture technicians and other more knowledgeable board members and fellow members. In Janakalyan Cooperative, this practice prevailed to a limited extent among the members from the same settlements.

Cooperative members and executives accessed farm technology and information also through utilizing linking social capital built with external service providers, mainly local DADO. Their participation in demonstration of farm technology, IPM FFS, farmers' training and tour programs, among others, were major sources of farm technology and information for them. However, utilization of linking social capital for this purpose varied across the cases,

corresponding to the growth of this kind of social capital at institutional or cooperative level, with the Triyasi Cooperative having highest level of utilization among the case study cooperatives, followed by Janakalyan Cooperative. Moreover, pre-existing linking social capital of Triyasi Cooperative and its associated farmers also helped in their enhanced access to farm technology and information. In sum, members had an increased access of farm technologies and information mainly by virtue of bonding social capital with the support of linking social capital.

#### ***5.5.1.2 Market Access and Supports***

In general, bonding and bridging social capitals were at play vis-à-vis marketing related supports to the members across the cases. Employment of bonding social capital for marketing related assistance was reported in all the cases. In Janakalyan and Triyasi Cooperatives such support was related to marketing information, including market price of vegetables in different potential distant markets. Some members had built bridging social capital with the traders. Such members acquired market information from these traders and shared with fellow members. Moreover, they were able to supply vegetables to such traders in distant markets with transactions accomplished by relying on their stock of social capital. In such transactions trust would play a crucial role. While for some members this attribute of social capital was found to have worked satisfactorily, some negative trust related issues were found for others. Some such issues included: incomplete and inaccurate price and marketing condition information; tampering with consignments and manipulative weighing practices; and delayed payments. Members who had supplied the traders in distant markets long term had time tested relationships with them, so were in a better position to benefit from such bridging social capital than member farmers who were relatively new in the business.

Moreover, sometimes member farmers would call big traders from local and distant markets to the production pocket to collect vegetables. In such situations farmers could bargain for better prices by consolidating their products to sell in bulk by virtue of their bonding social capital. In yet another deployment of bonding social capital, some members of Triyasi Cooperative were found jointly hiring or managing vehicles to collectively transport the vegetables up to the collection centre. As only one or a few members were involved in ferrying the stuff on those occasions, time and labour were saved for the rest. In Mirmire and Khapaudi Cooperatives members practiced individual marketing and sold vegetables in local markets or even at the farm gate because they had a small volume of production and readily

available local markets. These members exchanged information about prevailing retail prices they had learnt during retail selling. Utilization of this form of social capital for marketing supports by the members of comparatively smaller cooperatives was almost insignificant. In nutshell, members utilized bonding and bridging social capital for market access and market information, but this was limited to the members of relatively big cooperatives who generally produced for wholesale marketing. Trust played a key role in functioning of marketing support.

#### ***5.5.1.3 Access to Credit***

While cooperative members who contributed to the cooperative saving scheme were generally entitled to get credit from the respective cooperatives, bonding social capital was found to assist in accessing this service, across the cases, in various ways. In Mirmire Cooperative, some members were seen helping fellow members make monthly repayment instalments, or to meet the saving quota to be deposited. In the case of Triyasi Cooperative, some members reported recommending fellow members and also offering a security guarantee on the loans to be borrowed by fellow members. In Khapaudi Cooperative, members gave priority to the neediest members in lending but lending decisions were also based on the track record of applicants. So, although membership and saving contribution were eligible condition for accessing credit, bonding social capital came into play to help both in borrowing and repayment.

#### ***5.5.1.4 Labour Exchange***

Utilization of bonding social capital for informal labour exchange was reported in Mirmire and Khapaudi Cooperatives. Members of these cooperatives usually made exchange of labour in peak planting, crop management, and harvesting times. Most of the members lived in physical proximity to fellow members, rendering the exchange of labour and associated communications easier. Furthermore, the relatively small size of membership in both the cooperatives were found to have contributed in successful labour exchange, facilitating more dense and frequent interaction and exchange of information among the members. Therefore, this finding has suggested that use of bonding social capital for labour exchange was more prevalent in smaller cooperatives.

#### ***5.5.1.5 Access to Community Support***

Physical and emotional support in general needy situations and in emergency situations was a major non-market utilization of bonding social capital across the cases. Members were offered the help of fellow members when they were in trouble or landed in any urgent situation. Likewise, members worked together organizing social and cultural celebrations and rituals. Such support or norms of cooperation seemed to be more prevalent within Mirmire and Khapaudi Cooperatives. These two cooperatives, by virtues of proximity and size, were apparently better positioned to call on bonding social capital. Hence, it can be said that access to community support in emergency and in general need was the main non-market type utilization of bonding social capital prevalent more in smaller cooperatives where members lived in close proximity.

In sum, the cross case analysis has shown that access to farm technologies and other related information was the most prevalent utilization of bonding and linking social capital. Access to market and marketing supports was the main benefit of bonding and bridging social capital for the farmers involved in already established semi-commercial and commercial scale production. Bonding social capital, in terms of being trusted by other members, significantly helped in acquiring credit. Similarly, labour assistance and a helping hand from fellow members were other applications of bonding social capital for the members belonging to relatively small cooperatives with members living close to each other.

#### **5.5.2 Utilization at the Collective Level**

The cross-case analysis showed that input supply, output marketing, accessing government supports, risk sharing and community works were the major benefits or utilization of social capital at institutional or collective level.

##### ***5.5.2.1 Input Supply***

Utilization of social capital in accomplishing collective action for input and output marketing was found mainly in Triyasi and Janakalyan Cooperatives, more so with the former. Triyasi Cooperative maintained an agro-vet shop selling various farm inputs mainly fertilizers, seeds and chemical pesticides at cheaper prices than nearby private agro-vet shops. Janakalyan Cooperative and Khapaudi Cooperative had also started their retail shops with an aim of



providing their members and local farmers with farm inputs and daily needs. However, both of them were not regular in their services owing to failure to manage a regular supply of farm inputs, mainly subsidized fertilizers that could attain break-even in the business. However, both the cooperatives reported that they were planning to resume regular services with efficient management. In summary, findings showed only a limited role of social capital at institutional level in input supply, with more relevance of this service in comparatively bigger cooperatives.

#### ***5.5.2.2 Output Marketing***

Similarly, utilization of bonding social capital for output marketing was evident in Janakalyan and Triyasi Cooperatives. The major portion of the vegetable production within the catchment of Janakalyan and Triyasi cooperatives was sold through the collection centre owned and managed by Triyasi Cooperative. Vegetables collected there were supplied to various distant markets. Triyasi cooperative management, or members themselves, contacted traders from such markets and became involved in bargains with these traders for better prices and other conditions of output supply. In the other cooperatives, collective output marketing was not evident owing to the low volume of market surplus and readily available local retail markets.

Likewise, in output marketing members and non-members from Triyasi and Janakalyan Cooperatives used the Triyasi collection centre managed by Triyasi Cooperative. Khapaudi Cooperative also owned a vegetable collection centre but it was not in use. It met with apparent failure, or was superfluous, due to a relatively low volume of vegetables and the easily available retail markets locally and in nearby Pokhara city. Mirmire Cooperative was not involved in output marketing as member farmers could readily sell their produce locally. Thus, finding has suggested the limited scope of social capital at institutional level for selling of farm produce with comparatively bigger cooperatives utilizing for this service compared to smaller cooperatives.

#### ***5.5.2.3 Accessing Government Supports***

Both bonding and linking social capital were used in accessing government benefits. Utilization of group bonding social capital to access government services was evident across the cases, *albeit* at different levels. Triyasi and Janakalyan Cooperatives were found more

capable of influencing the provision of services from government agencies, such as DADO, than the other two given the fact that these two cooperatives represented established vegetable production pockets and farmers who had prior experience with agencies before the formation of the respective cooperatives. Mirmire Cooperative was found to have developed a relatively good stock of linking social capital but this was not reflected in resource tapping or service provisioning, owing to low resource endowment of the local DADO compared to the local demand. Similarly, only a modest level of linking social capital was developed and utilized by the Khapaudi Cooperative, mainly because it was a new and evolving production location. Another reason was the fact that the majority of the members were women who had only little prior experiences of approaching such agencies collectively.

Despite the variations in the capacity of case study cooperatives to access the government support across the cases, there was a general increase of in-flow of outside support into all case study cooperatives and villages beyond the cooperatives, by virtue of linking social capital developed at institutional level. Government funds for construction of community facilities such as collection centres, and building and irrigation-cum-drinking water schemes had been tapped by these cooperatives. Accessing government funding for such projects became possible through simultaneous building and utilization of linking social capital. All the cooperatives except Mirmire Cooperative had been able to build linking social capital with service providing agencies in the course of cooperative formation and during the process of accessing government funding for their community based schemes. The social capital thus built was utilized to tap further support from the DADO in the post cooperative formation phase.

Moreover, increased access to subsidized fertilizers, and extension and training services and facilities, by virtue of linking social capital built, both at individual member and institutional levels, was also reported from all these cooperatives. Besides, by virtue of linking social capital built with DADO, these cooperatives were also successful in building linking social capital with other support agencies and obtaining financial and other assistance from them. In summary, there was a general increase of in-flow of aid to the cooperative and the members by virtue of bonding and linking social capital, with variation in the level of support between the cases. Factors such as an established production area with farmers having prior experience of receiving government services, and highly accessible location and cooperative headquarters affected access to helpful inputs.

#### **5.5.2.4 Risk Sharing**

Triyasi and Janakalyan cooperatives also administered crop and livestock insurance among their members with the financial support of one government bank called Agriculture Development Bank, Nepal (ADB/N). The bank offered the insurance schemes to the cooperatives and their members on the basis of sharing the insurance premium with the insurer. Thus, this finding showed limited utilization of social capital for risk sharing purposes and schemes.

#### **5.5.2.5 Community Works**

Increased participation of cooperative members in community works was found in all the cases. Members provided cash and labour contributions in the construction of community structures and facilities which were directed towards facilitating agricultural production and marketing. Some of the major examples of community works were construction of irrigation-cum-drinking water schemes, collection centres and cooperative office buildings.

In summary, from the cross case study it was learned that use of social capital at institutional level was more relevant to collective access to extension and other government supports than any other purposes. There was a general increase of in-flow of outside resources across the cases by virtue of simultaneous building and utilization of this form of social capital. However, such inputs were sought more by relatively big cooperatives in accessible locations with already established crop production and prior history of linkage with the service providing agencies. In addition, attaining economies of scale and better bargaining, *albeit* at limited scale in input and output related transactions, were the main engagements of bonding social capital at the collective level for bigger scale cooperatives. Utilization of social capital for community works mainly entailed building structures and facilities to assist agriculture production and marketing. Also, there was a limited utilization of social capital for risk sharing.

### **5.5.3 Impact at Individual or Household Level**

A positive change in socio-economic conditions of the majority of members of respective cooperatives after their joining and enjoying the cooperatives services was noted across the cases. Even non-members benefited from spill over effects. A general improvement in living

standard of members in all the cases was clear. Improved household food security for the cooperative members and better education of their children were the most frequently mentioned positive impacts of social capital. Individual or household level impacts readily emerged from the data and common to all the cases were increased farm income and perceived increase in empowerment for members.

#### ***5.5.3.1 Contribution to Increased Farm Income***

Social capital played an important role in increased farm income. A scattering of members had started small scale vegetable farming before joining the cooperative. But their income had increased after joining of the cooperative as they benefited variously from the social capital built at institutional level as well as individual level. All the three forms of social capital had directly helped in increased farm income, chiefly through the members' increased access to institutional borrowing, farm technology and information, ease in farm inputs supply, and market information.

#### ***5.5.3.2 Increased Empowerment of Members***

It emerged from the data that increased empowerment of members was another most frequently mentioned impact of social capital. In all the cases, while many men members thought that they had become more skilled and more knowledgeable after becoming members, a critical impact of social capital had been found in women's empowerment. Women members had become more confident in running the farm and managing household affairs. Likewise, their worldview had changed substantially. They had become more confident in public speaking as well. In the past, most of the women members used to be confined within their homes, occupied in household chores. But, after joining the cooperative, they had been able to establish connection with the outside world beyond the boundary of their household premises. Their mixing with fellow members increased as they participated in cooperative meetings and other cooperative affairs. They were also able to network with people beyond the cooperative when they participated in various meetings representing the cooperative, and in farmer training and farmer tours, mainly organized under the auspices of the local DADO. Such networks and forums introduced them to the outside world and concurrently provided opportunity for them to learn a range of farming related knowledge and skills.

Also, there was a change in awareness level of members. They had become more aware of the importance of groups or cooperatives in supporting their livelihood endeavours and their rights and responsibilities as members through such engagements. They had also become aware of the potential economic opportunities in farming and exploiting those opportunities through utilization of social capital.

#### ***5.5.3.3 Other Positive Impacts***

Besides increased farm income and empowerment, positive attitudes and behaviour among the members developed. After joining the cooperative many members had quit socially undesirable activities. Moreover, many others had stopped wasting time gossiping and indulging in other unproductive pursuits such as playing carom board, chess, or gambling. Members learnt to make best use of their time in economic activities such as vegetable farming after they joined the cooperative. The environment within the cooperative, and their participation in various cooperative affairs, and various experiences by virtue of social capital, helped such members to learn, adopt good habits, and quit bad ones. Moreover, members increased in confidence to embark on commercial enterprises and agribusinesses. In sum, the overriding impact of social capital at the member or household level was contribution to increased farm income and increased empowerment.

To conclude, it can be said that social capital contributed in producing positive impacts in household income and farmers' empowerment, notably that of women in case study context. It also contributed to the development of productive activity and high moral attitudes and behaviours in the village youths and other community members.

### **5.5.4 Impact at Community Level**

#### ***5.5.4.1 Contribution to Increasing Trend of Vegetable Farming***

Across the cases, the trend of market-oriented vegetable production was on the rise at the time of the fieldwork.. Social capital was found to have contributed to this trend. Different forms of social capital were found to have played a crucial role in the successful endeavour of commercial vegetable production of the members by helping them obtain production and marketing related supports. Firstly, demonstration effect was evident within cooperatives as many members started vegetable farming motivated by seeing the vegetable farming success of fellow members. Producers gained necessary knowledge and learnt skills from fellow

members. Moreover, increased involvement of members of these cooperatives in vegetable farming and their success stories seemed to produce spill over effects within the villages, and, in some cases, had spread over the catchment of respective cooperatives. This had even changed the cropping system both in upland and lowland with traditional cereal based cropping systems gradually changing towards vegetable based ones in some commercial vegetable production pockets.

#### ***5.5.4.2 Increased Participation in Community Works***

By virtue of social capital the cooperative members were found to be involved in community works in all the case study cooperatives. Members contributed money and labour in various local projects including irrigation, construction of collection centres and cooperative office buildings, and so on. Moreover, community works such as building a temple, conservation of a source of water, forest conservation, cleaning and maintaining trails and so on, beyond the boundary of cooperatives, were also accomplished by the members.

#### ***5.5.4.3 Cohesiveness, Helping Attitude and Social Harmony***

None of the cooperatives reported major internal conflict and differences among the members, or between the members and the cooperative management. Rather, there was a development of unity among members and helping attitudes and behaviour among them. While helping a neighbour in need has been an important characteristic of rural Nepalese society, there has been downward trend in this in recent years with rapid modernization of Nepalese society. However, building and reinforcing of social capital in these rural areas was found to have contributed in revitalizing the tradition of helping culture among the rural people. Likewise, despite the fact that members follow different political ideologies, differences in political belief were not seen impacting decision making and smooth functioning of the cooperatives. Moreover, no practice of discrimination within the cooperative on the basis of caste, religion, or socio-economic condition was reported from all the cases. These traits pertinent to the bonding social capital were found to have played an important role in maintaining social harmony and cohesiveness in the community beyond the cooperative.

#### ***5.5.4.4 Contribution to Retaining Youths in the Village***

With the growing trend of market-oriented vegetable production there was a sign in some of the of case study cooperative catchments of a decreasing trend of youths leaving for foreign employment. Social capital had contributed to such trends. Across the cases, many youths returned from overseas jobs to become actively involved in market-oriented vegetable production. Similarly, local youths were also found to have quit overseas job and returned with the aim of exploiting these opportunities, after learning about the potential of vegetable farming. Moreover, some other villagers had also quit an in-country job to become full-time professional farmers.

#### ***5.5.4.5 Development of Positive Attitudes in Villagers***

Several positive word-of-mouth messages had spread to nearby villages about case study cooperatives. People increasingly realized the power of unity or bonding social capital. Local villagers learnt that hard work would pay. Likewise, development of general cooperative attitudes and behaviour among the villagers had increased.

In sum, the cross-case analysis has shown that social capital played a crucial role in bringing about various positive socio-economic impacts across the cases. Such major impacts were in the field of rural farming systems, community development, and community cohesiveness and harmony.

### **5.5.5 Impact of Social Capital in Cooperative Functioning and Performance**

The analysis showed that the bonding social capital positively influenced the functioning and performance of the case study cooperatives through the enhanced commitment of the cooperative leadership and general members towards the cooperative affairs; and in maintaining good governance in cooperative affairs. Likewise, linking social capital also helped to that end through providing various government supports and services.

#### ***5.5.5.1 Leadership's Commitment***

Cross case analysis showed that leadership's commitment in cooperative affairs had critically helped in cooperative functioning and performance. The analysis showed that the leadership commitment was largely a manifestation of bonding social capital and expressed variously within the cooperative. In general, by their attitudes and behaviours, all the sitting chairmen

were obviously cultivating unity among the members for the overall health of the cooperative and resultant wellbeing and prosperity of members. Most of them were found spending much of their time voluntarily for the cooperative affairs and had even spent their own money in cooperative affairs. All the chairmen had developed linking social capital with the support agencies and had brought various resources and supports in to the cooperatives from such agencies. They also expressed a sense of identity and belonging by striving to popularize the cooperative and their locality through successful cooperative performance.

In most of the cases, the chairman helped the members in their farming profession and in household related matters as well. All the chairmen, except the one who was a local political figure and hence remained busy in political affairs as well, maintained frequent communication and dense interaction with fellow members. Most of the chairmen had individually helped out fellow members when the latter were in need of assistance. Moreover, the chairman of Mirmire had farming related technical knowledge at par with regular technicians and gave various free technical services to the members. Except for Triyasi Cooperative, in all other cooperatives the chairmen were assisted by a voluntary service of a small team of board members and other general members. Thus, the commitment of the chairmen in terms of investing time and resources to the cooperative affairs and exhibiting trustworthiness, and helping and mentoring attitudes and behaviours contributed to the improved cooperative performance.

#### ***5.5.5.2 Members' Commitment***

Across the cases, commitment was evident in a number of ways. Firstly, members did not default and made regular repayments. Timely repayment of loans had helped in the smooth running of saving and credit schemes. Income from interest earnings provided the basis for cooperative existence and further member-oriented services which in turn reinforced or strengthened bonding social capital. Moreover, because members paid attention to cooperative affairs and business they ensured its smooth functioning and success. In all the cases, members learnt to pay attention to cooperative dealings and accordingly provided feedback and suggestions to help the cooperative move on the right track. While members criticized any flawed decisions and actions of the cooperative, they also offered suggestions as well. Members were alert to any potential financial irregularities or misuse of their deposits in the cooperative. They also kept an eye on potential defaulters in cooperative lending schemes and helped in drives which requested or insisted on repayments. Such



interest and attention to the affairs and cooperative businesses helped the leadership and the employees to keep honest, as well as to be more responsive towards the needs and aspiration of members. These factors contributed to better cooperative performance and satisfaction, so ultimately reinforced commitment and loyalty to the cooperative.

Members' commitment in terms of utilizing cooperative services and facilities also helped the success of the cooperative. Especially in Triyasi Cooperative, members were found: to purchase farm inputs from cooperative shop; borrow from the cooperative; and bring vegetables to the cooperative managed collection centre. All these contributed to the income of the cooperative, supporting the smooth functioning and expansion of cooperative activities aimed at members' welfare. Further, members' following leadership or cooperative management calls for the meetings and other cooperative affairs or activities also helped in cooperative success. In all the cooperatives, members responded well to the leadership's call to take part in cooperative affairs. In essence, members' commitment in terms of exhibiting trustworthy behaviour together with paying attention to, and participating in, cooperative affairs and contributing to the cooperative's income buying services and facilities helped enhance cooperative performance.

#### ***5.5.5.3 Good Governance in Cooperative Affairs***

Cross-case analysis showed transparency in cooperative affairs, and participatory decision making were two main themes pertinent to good governance and were common across the cases. Financial transparency was a crucial aspect of perceived good governance within the cooperative and an important reason cited for the smooth functioning and success of respective cooperatives. The cooperative management usually unveiled the financial situation of the cooperative and status of saving deposit and lending in the monthly meeting in all cooperatives except Triyasi. The cooperative management also informed the members about the external support received by the cooperative and discussed how it would be applied. Members of Triyasi Cooperative, however, would learn about the financial situation and other cooperative affairs popping up in the cooperative office and seeking information from the manager. They also would get information about on-going activities and future plans and any new developments in cooperative affairs when they visited the cooperative. Members could get such information from board members as well when they met with them in the cooperative office or outside.

However, a few members across the cases were found to be sceptical about the cooperative management maintaining transparency, especially, financial transparency. One important reason for such fractured trust of members in the leadership and the manager, and psychological fear of them could be the fact that in recent years, saving and credit cooperatives mushrooming across the country, there were reported cases of managers and board members absconding after embezzling shareholders' deposit money, creating havoc and chaos in the overall cooperative sector. News of such incidents frequently appeared in national newspapers.

All the cooperatives except Triyasi Cooperative were found to hold a thorough discussion in the cooperative meeting before deciding on any agenda or issues. Board members let all the members know about future plans and actions as they unveiled them beforehand to get feedback and suggestions from the members before making any decision to their effect. Direct participation of general members in the decision making process was apparently little practiced in Triyasi Cooperative owing to its numerous membership and absence of the monthly cooperative meeting. In this cooperative members' concerns were brought to the cooperative via employees and board members. Appropriate decisions would then be taken in order to address issues raised by the members.

Communication and interaction between the chairman, office bearers, board members and general members was central in cooperative success in Mirmire, Janakalyan and Khapaudi Cooperatives. More frequent communication and interaction was observed in the case study of Mirmire and Khapaudi Cooperatives owing to their relatively small scale of operation and membership. Such dense interactions helped in bridging any possible communication gap between the general members and the board, and helped to run the cooperative in the way that catered to needs and aspirations of the majority of members. Importantly, in these two cooperatives the monthly cooperative meeting took the form of a board meeting, or the GA as most of the members would turn up and the meeting could discuss an open agendas. In case of Janakalyan Cooperative although the size of membership was relatively large there was a practice of holding monthly meeting to collect and mobilize savings from the members. This meeting was also attended by the office bearers and board members. Regular board meetings were also held in this cooperative to take decisions on issues raised by the members in the monthly meeting. However, in case of Triyasi Cooperative, given its large membership size, and the fact that it ran multiple activities and bigger scale of operation, communication and

interaction within the board of directors, and between board members and general members, was not regular, intensive and widely practiced.

Most of cooperative managements across the cases directed equitable distribution of the free items and other support received from outside agencies. These cooperatives, except Triyasi Cooperative, generally decided the distribution of such benefits through the cooperative meeting. In case of Triyasi Cooperative such acquisitions would be distributed equally among the members at the decision of the chairman and available board members.

Thus, apparent good governance practiced by the cooperative management in terms of maintaining transparency in cooperative affairs, participatory decision making and equitable distribution of cooperative generated benefits among the members crucially impacted in smooth functioning and improved performance of the cooperatives.

#### ***5.5.5.4 Mobilization of More Supports from Service Providing Agencies***

Linking social capital also played a supporting role in the improved cooperative performance and success. Pre-existing linking social capital, or this capital built with service providing agencies during, or after, the formation of the cooperative brought various extension and funding supports to the case study cooperatives. The supports ranged from purely extension educational services to material and funding support for local community based schemes. Moreover, these DADOs also facilitated or coordinated institutional capacity building of these cooperatives through: helping them in their registration; administration and financial management; and linking them to other government and non-government agencies in order to access resources and support from such agencies.

The role of linking social capital was vital in the performance of the Janakalyan and Triyasi Cooperatives. Constant inputs and supports from DADO helped in the commercialization of agriculture within the catchments of these cooperatives as well as in better service provisioning and expansion in cooperative business. The dependency syndrome was also observed in case of Khapaudi Cooperative to some extent as it became less active after assistance from DADO had declined.

In sum, although linking social capital played a supporting role, the bonding social capital expressed at individual, as well as collective levels, positively impacted cooperative performance. Bonding social capital brought about, or polished, the commitment of the

leadership and the members, and good governance in cooperative functioning and management across the cases. These factors contributed towards the smooth functioning and improved performance of the cooperatives. Improved cooperative performance in terms of better serving the members' needs and interests and added benefits to them, in turn, had reinforced the bonding social capital through enhancing group loyalty and unity among members. Moreover, such cooperatives can also develop increased bargaining power in further accessing government supports and resources through developing linking social capital. Hence, maintaining the bonding social capital seemed to be a key for the better performance and success of the cooperatives.

### **5.5.6 Maintaining Bonding Social Capital**

Section 5.5.6 has shown the critical role of group bonding social capital in the functioning and the performance of case study cooperatives. Maintaining of group bonding social capital within the cooperative mainly involved demonstrating loyalty and continuous commitment towards the cooperative by the members and the leadership. Cross-case analysis showed an expectation of potential economic benefits, shared sense of identity and belonging, fear of social sanction and personal attributes and interests were the major motivations or driving force to maintain group bonding social capital across the cases.

#### ***5.5.6.1 Continuous Flow of Benefits***

This motivation applied more to members than to leadership. The cross-case analysis showed that members' eagerness to continuously receive services and facilities from the cooperatives motivated their commitment to the cooperative. They appeared to know that they could maintain this continuous flow only when the cooperative ran smoothly and properly. Both members and leadership also seemed to want the cooperative to flourish and prosper because that would mean their own prosperity and wellbeing as well. Moreover, the main leadership and a team of board and general members in most of the cooperatives served their respective cooperatives on a voluntary basis. Other general members enjoyed the fruits gained partly because of these volunteers. This benefit enjoyed by the members also apparently motivated them to continue their group loyalty and commitment.

#### ***5.5.6.2 Fear of Sanction***

Members feared being criticized by fellow members or being socially excluded if they committed anything wrong. Moreover, many members were found to have corrected past behaviours after membership and participation in cooperative affairs. In many cases, this also radiated beyond the cooperatives among the non-members. Likewise, the leaders of the case study cooperatives were also found conscious of potential social sanction. They apparently feared losing trust and credibility with the members if they failed to deliver. They also feared of being attacked by the members and even socially boycotted if found guilty of financial irregularities or any misconduct.

#### ***5.5.6.3 Identity and Belonging***

Many members across the case study cooperatives felt pride in belonging to the cooperative and that it represented their famous production pocket. They also appeared to wish to promote the fame of the cooperative and its locality. Such shared feelings of members also apparently motivated the members to be committed to the cooperative affairs. Likewise, all the chairmen were found wanting to maintain the fame of their place or the cooperative. Most of them also wanted to see their area was developed in terms of production efficiency and other physical developments such as roads or transport facilities, or in township development and expansion.

#### ***5.5.6.4 Personal Attributes and Interests***

Further, some personal qualities of the chairman appeared to contribute towards maintaining group bonding social capital. Personal interest in social contribution and apparent altruistic behaviour were found contributing towards the leadership commitment in the main leadership of Mirmire, Janakalyan and Khapaudi Cooperatives. Similarly, achieving political mileage utilizing social capital built through the cooperative was one of the motivations. For example, the chairman of Triyasi Cooperative who had the political background and affiliation was also aspired to gain political mileage by virtue of cooperative leadership.

In summary, cross-case analysis has shown that motivation of leadership as well as members to maintain group bonding social capital was apparently the outcome of their strategy of maximizing personal utilities or personal benefits out of collective action, as well as manifestation of various attributes of social capital.

### **5.5.7 Summary and Conclusion**

This section presented findings on utilization and impact of social capital built within the framework of agricultural cooperative development. The cross-case analysis has shown that utilization of bonding social capital, both at the individual and community levels, was more significant than the other two forms of social capital. Accessing farm technologies and information and credit were two major utilizations of social capital at the individual member level. Likewise, better market access, marketing supports and marketing information were the benefits for semi-commercial and commercial farmers from bigger cooperatives belonging to well established production pockets. Similarly, utilization of bonding social capital in terms of exchange of labour was more prevalent among the members from small cooperatives who lived in close proximity. At the collective level, the main utilization of social capital was directed to accessing government services and facilities, with limited use for produce marketing and input supply by the bigger scale cooperatives. Moreover, accessing better government support and services was shown to be influenced by factors such as history of established production and prior exposure to the support agency services, accessibility and strategic location of the production pockets and the cooperative headquarters. Also, utilization of social capital for community works was more prevalent in smaller cooperatives.

The major impacts at member or household level were contribution to increased farm income and increased empowerment. Likewise, expanding and popularizing vegetable farming, and reinforcing of the trend of community participation in local resource management and community cohesiveness and harmony, were major impacts at community level. Similarly, group bonding social capital helped critically in the smooth functioning and improved performance of the cooperatives. It brought enhanced commitment of the cooperative leadership and general members into the cooperative affairs; it maintained good governance in cooperative affairs. An expectation of potential economic benefits, shared sense of belonging and identity, fear of social sanctions, and personal attributes and interests were major motivations to maintain group bonding social capital.

### **5.6 Chapter Summary and Conclusion**

This research sought to explore the process and mechanisms of social capital building within the framework of development of rural agricultural development, and the utilization and impact of social capital in rural livelihoods. This chapter provided the findings from the

cross- case analysis based on the research questions and conceptual framework presented in Chapter 2. Findings of within-case analysis from four cases presented in chapter four were compared and contrasted to develop cross-case findings through higher order thematic development. This chapter presented the findings on triggers and drivers, mechanisms, enabling factors, manifestation, and utilization and impact of social capital in the context of rural agricultural cooperatives. Cross-case findings were robust as within-case findings were similar in most of the constructs except for the triggers of social capital building, in which different factors triggered the social capital building in different case study cooperatives.

The primary finding is that development intervention, or local stimulus, triggered the building of social capital in rural communities in which development interventions were more powerful than local stimulus. Triggers were combined with various drivers, which motivated local farmers to form and join agricultural cooperatives to get benefit from collective action and collective bargaining. Formation of cooperatives provided a number of mechanisms of social capital building. Monthly meetings and selling vegetables through collection centre were two main mechanisms. Besides, a number of informal and traditional forums and practices also supported the building process by enhancing an effectiveness of in-house mechanisms available within the cooperative.

Changes in various aspects of social capital resulted with the development of the cooperative. Increased unity was the main manifestation of change in group bonding social capital. Increased norms of reciprocity and trust were the manifestation of bonding social capital at individual level. Likewise, building new networks, or the existing ones, was reinforced with service providing agencies. Similarly, there was a poor development of bridging social capital. Change in group bonding social capital was at the core of the social capital building process. It influenced building of bonding social capital at individual members' level and that of bridging and linking social capital.

Social capital was utilized by members to access other forms of capital, with human capital being the prime one. Likewise, social capital contributed in producing various impacts at individual member and community levels which helped improve rural livelihood. Additionally, group bonding social capital especially contributed in improving cooperative performance by ensuring enhanced commitment of the members and cooperative management. Maintaining group bonding social capital for sustained commitment, in turn,

was guided by strategies of maximizing their own utilities by these parties, and were also influenced by social capital itself. The next chapter will present discussion of these findings.



## **CHAPTER 6      DISCUSSION OF FINDINGS**

### **6. 1 Introduction**

Chapter 5 presented findings from cross-case analysis. The main purpose of this chapter is to discuss those findings against the research questions and conceptual framework of the study and compare them with the work of earlier researchers and literature. The chapter will deal with answering each of the four research questions in turn.

### **6.2 Research Question 1**

**What are the triggers and drivers of social capital building and how they are manifested within the framework of development of rural agricultural cooperatives?**

The first research question sought to examine factors that triggered the social capital building that occurred with the development of rural agricultural cooperatives. The research question also examined the various drivers of social capital building.

#### **6.2.1 Triggers of Social Capital Building**

One of the major findings of the study was that development intervention from external agencies triggered the social capital building in the rural farming communities. This finding corroborates with findings of a number of other studies which have also shown that community-oriented external interventions helped to build and enhance social capital (Flora & Flora 1995; Putnam 1995a; Bebbington 1997; Cavaye 1997; Bebbington & Carroll 2000, 2002; Chase & Christensen 2009). Similar finding was also reported by Westendorp & Biggs (2002) who found that external intervention in terms of launching extension educational activities such as FFS in rural areas helped in building of social capital among the rural populace in Nepal. The writers, however, seemed to focus more on network aspects of social capital only, for example, the establishment of new types of linkage and emergence of new institutions as a result of IPM FFS program in Nepal. Swanson & Samy (2005) also assert that an extension system can build social capital in rural communities.

Another finding was that local stimuli, either spontaneous (in the form of occurrence of natural disaster), or deliberate (as an initiative of local leader farmer), triggered the social capital building process by prompting the local farmers to unite in order to carry out collective action. Organizing of people at grassroots in a farmers group and cooperatives to collective action and to enhance their collective bargaining strength is common practice in developing countries. However, the role of local stimuli in precipitating collective action is rarely discussed in the literature. Findings also showed that irrespective of whether spontaneous or deliberate in nature, local stimuli were directed towards accessing external resources and supports for the community. This finding revealed that those external supports critically helped maintain the tempo and furthering the social capital building process, suggesting that, without such supports, building of social capital would be questionable or uncertain.

In sum, the findings have suggested that development interventions and support play a critical role for social capital building in rural communities by two ways: firstly, by triggering the process; and secondly, by providing critical support to sustain the effect of the trigger. While the findings from this study and other previous studies have shown that external intervention has the capacity to build social capital in the rural community, extension and other development agencies in Nepal seem unaware of this fact. In general, most of the external support to the community is aimed at the material wellbeing of the local population. In the Nepalese agricultural extension system there was a shift in emphasis several years ago, from a transfer-of-technology approach intended to enhance production and productivity to the introduction of concepts such as decentralization and participatory extension, farmers' empowerment, and agriculture value chain development (Shrestha 2008; Shrestha & Adhikari 2010). Social capital building is not an explicit aim of extension programs and activities in Nepal. In view of the findings of this thesis, building of social capital can help in achieving the goals of extension and other community development programs if building of social capital is inbuilt within such interventions.

### **6.2.2 Major Drivers of Social Capital Building**

Findings showed that the major drivers of social capital building were poverty and livelihood issues, government policy, economic opportunity, collective bargaining opportunities, and socio-cultural factors.

### ***6.2.2.1 Poverty and Livelihood***

Findings suggested that poverty and livelihood related factors served as an important driver by motivating individuals to join a farmers' network in the form of a cooperative. This type of motivation of small farmers has been reported previously by Rondot and Collion (2001). Hong and Sporleder (2007) also assert that farmers' economic needs and desire to improve their economic situation are the major incentives for them to join an agricultural cooperative. The case studies showed that poverty and livelihood related factors, such as potential access to free extension supports, to other unspecified material and non-material benefits, and to credit, were the key motivations for such farmers to join.

The tendency of Nepalese farmers to join the farmers group and cooperatives in the expectation of free-of-cost extension supports mainly from DADO was also reported by Sharma & Khanal (2009). Membership as the criteria for accessing government extension supports were also reported elsewhere (Salifu et al. 2012). Likewise, free material and non-material extension and other government assistance and facilities to be provided through farmers' cooperatives in many developing countries have attracted membership in cooperatives and other types of farmers' organizations (FAO 2010; Feigenberg et al. 2010; Salifu et al. 2012; Akram 2013). Krishna (2004) also reported that rural villagers join a grassroots farmers' organization for some immediate economic benefits in rural India. Similarly, Hobbs (2000) found in Tanzania that motivation for village group formation was to access donor support.

This finding may be attributed mainly to the high incidence of poverty and small scale subsistence farming in the study area. Such farmers arguably tend to be attracted more towards free handouts than learning the associated new farm technologies and developing commercial enterprises and entrepreneurship. The relatively primary stage of development of agricultural cooperatives observed in the study area, with only limited member-oriented services available, may be associated with this, along with the relatively poor state of agricultural commercialization in the study area. However, ineffective implementation of such demonstrations by extension agents could be another reason for farmers' inclination towards free inputs rather than learning farm technologies.

Access to credit was another overriding motivation for farmers to join the cooperatives. This finding partially explains the growing number of saving and credit cooperatives across the

nation (MoCPA 2015). It also explains why saving and credit facilities have become the dominant activity in the case study cooperatives, and in many rural agricultural cooperatives in Nepal. Small and resource poor farmers in rural Nepal often find it hard to meet financial requirements for the inputs and labour in farm business owing to relatively poor access to institutional credit due to absence of local branches of commercial banks, collateral related requirements and lengthy process, and high interest rates. Such farmers often have to face different types of exploitation in informal lending as well (Basyal 1999; Haugen 2006). Membership in a cooperative and subsequent building of social capital provides ease of access to farm finance. The role of such schemes in social capital building is also discussed in the literature (Feigenberg et al. 2010).

Findings also revealed that access to timely supply of purchased farm inputs, mainly chemical fertilizers and seed also contributed to the decision of a few local farmers to join the cooperative. Shrestha (2010) also reported a trend in recent years for farmers in Nepal to register their cooperative in order to access subsidized chemical fertilizers. However, only a few agricultural cooperatives might have been involved in selling farm inputs including subsidized chemical fertilizers and seed of improved crop varieties on regular basis irrespective of availability of quota of subsidized inputs to be provided by the government.

There is a general tendency of Nepalese farmers to be quite concerned about the timely supply of quality inputs, which is a frequent problem. Findings corroborated this as a majority of participants appeared to believe that ordinary farmers were in need of a more reliable supply of quality inputs. However, despite this belief, only a small portion of participants mentioned this as the reason for joining the cooperative. The reason for their perception could be the fact that they did not know the potential role of agricultural cooperatives in supplying such farm inputs as well because they had not seen many agricultural cooperatives involved in selling farm inputs to their members.

Likewise, potential advantage in marketing of farm produce was another reason for some farmers to form and join cooperatives. These farmers who had previously been individually marketing their own produce were mainly from established vegetable production pockets. They were influenced by the government policy of supporting cooperatives to develop market infrastructure such as collection centres and market yards. The potential benefits of better output prices and better terms and conditions for selling of produce by virtue of collective bargain might also have motivated such farmers. However, these marketing functions had

been little developed, with only a limited role of cooperatives evident in produce marketing and none directly involved in purchasing and selling of members' produce.

Thus, poverty and livelihood related issues played a crucial role in rural farmers' decisions to join the cooperative. Of various factors, free extension handouts and unspecified potential benefits of cooperative membership and access to credit were the major motivations, which indicated high relevance of these factors for the poor and small scale farmers in the study area. Expected ease in output marketing and input supply also played a minor role in farmers' decision.

#### ***6.2.2.2 Policy Regime***

Findings showed that the benefits of cooperative membership perceived by farmers were enhanced by a strong policy position from the Nepalese government to use cooperatives as vehicles for provision of rural extension support. Through the extension policy of MOAD, extension teaching activities are generally implemented through farmers' groups and cooperatives, and certain funding support is provided only through farmers' groups or cooperatives. With this policy being widely adopted by DOA it has become increasingly clear to farmers that they can only expect to access extension support through group or cooperative membership. This policy has encouraged local farmers to become collectively organized in informal and formal groups and is a main reason for the recent remarkable growth in the number of cooperatives.

Government promotion of development of cooperatives in rural areas has been an important strategy of poverty reduction and rural development in recent years (MoF 2014). As formal institutions, cooperatives are managed by the Cooperative Act, 1992. Also, cooperatives are exempted from various taxes and duties. This policy has served as a catalyst to initiate the building process of social capital by encouraging farmers to join cooperatives in the hope of receiving tax holidays and various other forms of government support. The effects of such policies in stimulating social capital building through collective actions have been confirmed by FAO (2010) in rural Nepal, and by Pretty and Ward (2001) more widely. Thus, findings suggest a strong influence of extension and farm sector related government policies on social capital building in rural areas, through encouraging rural farmers to get organized in farmers' cooperatives, which serve the platform for social capital building.

#### **6.2.2.3 Economic Opportunity**

Findings showed that exploiting an economic opportunity in terms of market-oriented vegetable production also served as the driver of social capital building. This finding may be attributed to the fact that such farmers can find access to various production and marketing supports to better exploit such openings when they join the cooperatives and build social capital. Without the presence of such opportunities rural farmers would not be interested in joining such networks. Small farmers in developing countries have been increasingly engaging in vegetable farming and it has been a major source of income for most of them (IFAD 2010). Scope of production and selling of seasonal and off-season vegetables in nearby and distant markets has emerged as the main economic opportunity in the rural farming communities of many such countries.

The finding may also be attributed to the influence of the policy of channelling various extension and other government supports to the farming communities through the cooperatives. Small farmers with cooperative membership can benefit from this policy. Moreover, more chances of smooth functioning and success of the cooperatives can be expected if majority of the members of the network are involved in exploiting the same economic opportunity by enhancing collective action and collective bargain.

#### **6.2.2.4 Collective Bargaining**

Findings showed that potential collective bargaining also encouraged local farmers to form and join the cooperative. The cooperative was an instrument for them to pressure the government agencies for more support and facilities as well as a means to fetch better prices and enjoy better terms and conditions from the traders. A similar finding was also reported by Jacobson (2012), who found that one of the main reasons for small-scale farmers to join a farmer organization was their desire to accomplish activities that are not possible or efficient to perform individually. Likewise, other authors also argue that building of social capital through joining such networks improves the level and quality of collective action and collective bargaining (Staatz 1987; Wennink et al. 2007).

#### **6.2.2.5 Socio-cultural Factors**

Findings also showed socio-cultural factors such as being called upon by kin, peer pressure, and migration, also influenced the decision to join the cooperative by rural farmers. The

finding is attributable to the tendency of Nepalese rural people to follow close friends, relatives, local leaders and local extension agents or other locally operated community development workers to participate in, or embark on, new ventures or programs such as cooperatives. This finding has suggested that the existing socio-cultural context of the rural farming community indirectly influences social capital building by prompting the farmers to join the cooperatives. The finding can also be viewed from the perspective of dependency of rural people on fellow villagers and kin for their decisions to adopt new ideas and practice. It also hints at their ignorance, possibly owing to limited education, so they often tend to be influenced by kin and peers in their decisions. Moreover, it can also be viewed as the importance of bonding social capital in rural farming communities.

In sum, the study has shown that although all the drivers had contributed to the social capital building process, prompting the formation of agricultural cooperatives and local farmers to join them, policy was an explicit and dominant driver, with other drivers directly or indirectly influenced by this driver. The policy of mobilizing funding to support agriculture production and marketing functions in rural areas; implementing field based extension programs through farmer groups and cooperatives; and supporting the cooperative sector as a strategy of rural and agriculture development played a main role in establishing cooperatives. Likewise, access to free extension and other government support, supply of farm inputs and produce marketing were also influenced by the government policy of supporting cooperatives. Similarly, exploiting potential economic opportunity in terms of market-oriented vegetable production was also influenced by same policy by which vegetable farmers could access benefits by joining the cooperatives. Also, findings showed that collective bargaining was more related to accessing government support, which was also guided by that policy.

### **6.2.3 Summary and Conclusion: Drivers and Triggers of Social Capital Building**

This section has presented the discussion on findings about the triggers and drivers of social capital building. It has shown that social capital building in farming communities of rural Nepal can be triggered by providing development intervention as well as supporting the communities in the aftermath of natural disaster and supporting the local innovative leader farmers to organize the local farmers to enhance bargaining power to acquire extension and other government contributions. However, development intervention and supports can be critical in fostering social capital in such communities besides playing a direct role in

triggering the social capital building processes. Such interventions and supports also provide crucial supports to sustain the effect of trigger.

Similarly, by and large, government policy of supporting the farming communities and cooperative development can be a critical driver of social capital building in Nepal which has motivated rural farmers to form and join the agricultural cooperatives. In a nutshell, this policy of supporting the farm sector and rural development plays a crucial role in activating the triggers and steering the process of social capital building by rural agricultural cooperatives and their members. The next section will discuss findings on various mechanisms of social capital building in rural agricultural cooperatives.

### **6.3 Research Question 2:**

**What are the various mechanisms of social capital building within the structure and function of cooperatives and what are the key enabling factors of the building of social capital?**

This research question served the core agendas of the study. It aimed to explore various mechanisms present within the rural agricultural cooperatives that facilitated the building of different forms of social capital. It also sought to identify the factors that supported the building.

#### **6.3.1 Classification of Mechanisms**

Findings showed that mechanisms of social capital building present in case study cooperatives could be classified on four bases: regularity, boundary, scope, and frequency of occurrence. Based on the given classification, findings revealed that the majority of mechanisms fell under ‘within the cooperative’ type of mechanisms classified under boundary. This finding suggests that major mechanisms of social capital building in the case study cooperatives facilitated the building of bonding social capital because such mechanisms were associated with networking and interaction between and among the cooperative members.



## **6.3.2 Major Mechanisms of Social Capital Building within the Cooperatives**

### ***6.3.2.1 Monthly Cooperative Meeting***

Findings showed that, in relatively small cooperatives, a monthly cooperative meeting was the dominant mechanism of social capital building. This finding partly corroborates the previous findings by Hong & Sporleder (2007) and Zeuli (Zeuli & Radel 2005) who highlighted the importance of cooperative meetings, both regular and *ad hoc*, in the creation of social capital in agricultural cooperatives.

In the main, agricultural cooperatives operating in the study area were relatively small in terms of membership size and scale of operation. Saving and credit was the main activity of such cooperatives although they were not dedicated saving and credit cooperatives. Monthly meetings in such cooperatives were basically held for saving collection and mobilization. It, however, also provided an opportunity for the members to build networks and develop interpersonal relationships. Also, dense and intensive face-face-interaction was possible because of its regularity and frequency, and small size of membership. Moreover, members participated in such meetings with board members and employees, wherever applicable, which facilitated building and reinforcing of bonding social capital. In sum, the finding has reiterated the importance of the cooperative monthly meeting for the regular meeting and interaction among members in smaller cooperatives resulting in building and reinforcing of bonding social capital. However, this mechanism may not work well, or may not even exist, when such cooperatives expand their membership and scale of operation.

### ***6.3.2.2 Selling Vegetables through Collection Centre***

Findings showed that utilizing the collection centre by the members, non-members and traders is the most common and regular mechanism of social capital building in the relatively big agricultural cooperatives with sizeable membership and scale of operation of the member oriented services and activities.

Recent years have seen an increased emphasis of the government and the DOA on establishing collection centres under the management of rural agricultural cooperatives near production pockets. Such collection centres have served as the venue for produce negotiations and transactions relating to seasonal and off-season vegetables, between farmers and traders. Selling vegetables from such collection centres has been a trend in recent years.

Cooperative members and non-members alike supply vegetables to the collection centre. In some cases, cooperative, or collection centre management, buy the stuff from the farmers and sell to traders. However, in the majority of the cases, such cooperatives only provide logistic support such as temporary produce storage facilities and weighing. They also help farmers link to the traders from distant markets and may also facilitate negotiation and transaction between the traders and farmers. Irrespective of the modality of the involvement of cooperatives in marketing farmers' produce, selling produce through collection centres serves an important mechanism of social capital building. This mechanism has the capacity to build bonding social capital among the members and cooperative management, and bridging social capital between the members, non-members and traders. Thus, the finding has suggested the potential use of collection centre services as the main mechanism of building of bonding and bridging social capital when rural agricultural cooperatives grow bigger. In fact, with growing demand of fresh vegetables in the country such cooperatives can be expected to grow in number and size in rural Nepal in days to come.

#### ***6.3.2.3 Farmers' Field School***

Findings showed that training and other extension activities also served an important mechanism of building and reinforcing of bonding and linking social capital with little scope for that of bridging social capital. However, because they are held less frequently, such activities can be expected to be less effective than other regular and frequently occurring mechanisms. Findings also showed that IPM FFS was highly effective in building bonding social capital although it was not a regular mechanism. Similar finding was reported by Westendorp & Biggs (2002) who studied IPM FFS in Nepal. IPM FFS has been a popular tool of managing crops and pests in recent years. This tool is appreciated for its effectiveness in imparting IPM technologies to the farmers. It is also hailed for its social learning and farmers' empowerment outcomes. However, relatively high operational cost of running FFS is the weakness of this tool and it can be difficult for a cooperative to run with its own resources. On the whole, IPM FFS can be used as the main mechanism of social capital building in rural agricultural cooperatives.

#### ***6.3.2.4 Other Mechanisms***

Findings showed that besides the foregoing mechanisms some other mechanisms were available, although they were less prominent in terms of regularity and frequency. Such

mechanisms were members' visits of the cooperative, and exchange visits between members and executives, and staff of service providing agencies.

To conclude, the monthly cooperative meeting and selling vegetables through the collection centre were the main mechanisms of building and reinforcing bonding social capital in smaller and bigger cooperatives respectively. However, with a growing trend of market-oriented vegetable production, opening of new cooperatives and expansion of collection centres can be expected with a potential of collection centre becoming the main mechanism of the social capital building in future. Moreover, IPM FFS can potentially be an effective mechanism provided that cooperatives are capable of running it from their own resources.

### **6.3.3 Informal Mechanisms beyond the Cooperatives**

Although it was not envisaged in the original conceptual framework of the study presented in Chapter 2, findings revealed that, besides various mechanisms present within the cooperative, a number of mechanisms of social capital building existed beyond the cooperative that complemented the mechanisms within the cooperative and supported the process of social capital building. Key among such mechanisms were chance encounters by members strolling in the village at leisure, and various local socio-cultural occasions when members would meet and interact. In this respect Sander (2006) has also highlighted the importance of informal ties between community members in building social capital. He showed conversion of informal social ties to group informal social activities, and eventually to community social capital.

Such mechanisms can be expected to help the effectiveness of mechanisms present within the cooperatives by allowing members to approach each other and develop shared views and understanding. Moreover, such mechanisms were more prevalent and effective in smaller cooperatives with members living in close proximity. Intensive interactions among the members are possible when members are small in number and are living in close proximity. Similarly, these interactions arguably help in reinforcing bonding social capital.. Taking part in socio-cultural events being organized in the village, and meeting fellow villagers in leisure and while strolling has been a traditional practice of informal interaction among the villagers in rural Nepal. However, with changing socio-economic and demographic structures in such rural villages occurrence of such practices has declined. Findings have suggested that cooperatives may benefit from these informal mechanisms beyond the cooperative.

#### **6.3.4 Functioning of Various Mechanisms of Building of Social Capital**

Findings showed various mechanisms facilitated building of different forms of social capital. For example, when participating in monthly meetings, besides taking part in discussion on the specific agenda of the meeting, member farmers also talked about pertinent issues of farming and marketing, matters related to local community development, local and national politics, and even household related matters, with each other. Engaging in dialogues with fellow members and sharing ideas and information members built or strengthened their shared networks and gradually developed joint understanding, norms of reciprocity and trust among themselves as a result of their repeated interaction through such meetings. Likewise, when members visited the cooperative office they would have an opportunity to meet and interact with fellow members, board members, and employees. Such interactions helped them become more familiar with each other and to build and reinforce the bonding ties among them. Also, members' repeated visits and interaction also helped in building or reinforcing their bonding social capital with the cooperative employees.

The study showed further that selling vegetables through the cooperative managed collection centre meant member farmers had an opportunity to chat with other farmers during handling of produce and waiting for the traders to come to buy. On such occasions, they shared information about prevailing market prices in markets or with potential buyers of their produce. They also exchanged their experiences of supplying to particular markets and the traders. Also, they talked about various other issues of farming and marketing. They also chatted about personal and household matters and other affairs of mutual interest. Members and non-member farmers would make new friends and renew interpersonal ties with fellow members and other non-member farmers. They also had an opportunity to network with other farmers, cooperative executives and employees, and traders coming from distant markets. Likewise, findings also revealed that when members met with fellow members and other non-members in their leisure or at celebrations they usually chatted and developed shared views and understanding on various topics of collective interest. Such development strengthened interpersonal networks and relationships, at the same time enhancing the effectiveness of various mechanisms of social capital building present within the cooperative.

A number of scholars have underscored the importance of interactions between and among people in social capital building. Repeated interactions help develop shared understanding and norms of reciprocity and trust between the interacting parties (Feigenberg et al. 2010;

Nardone et al. 2010). Prominent scholars of social capital literature also share the similar view that personal connections and interpersonal interactions are the basic prerequisites of social capital building (Bourdieu 1986; Coleman 1988; Wilkinson 1991; Fulton & Ketilson 1992; Putnam 1995a; Flap & Völker 2003; Zeuli & Radel 2005; Feigenberg et al. 2010). Wagner and Fernandez-Gimenez (2009) in a study of ten community based collaborative groups in northwest Colorado arrived at a conclusion that the interactions within such groups were critical for the building of social capital and solidarity. However, they suggested a need for further research to determine whether frequency and duration of interactions could have impact on the level of social capital development.

A similar kind of interaction in a learning environment was found an effective instrument for the simultaneous learning of farm technologies and building of social capital by the member farmers in Australia (Kilpatrick & Falk 2003). The finding is also in line with Cavaye (1999, p. 30) who summarizes the importance of contacts and interactions between various actors in building social capital ‘as people began to express and act on their concerns they met other stakeholders and community sectors cooperated more. Gradually, emotional and reactive thinking became more constructive and strategic. As contact between individuals and groups increased participants built relationships and expanded personal networks’.

In summary, the finding has suggested mechanisms ingrained in the structure and function of cooperatives fostered building of social capital by helping members and other stakeholders: initiate interaction and dialogue; share ideas, information and personal feeling; and build shared values and understanding leading to building or reinforcing of the network, trust, and norms of reciprocity.

### **6.3.5 Enabling Factors**

Findings revealed that a number of factors positively influenced the process of social capital building. Such factors were related to people, institutions and context.

#### ***6.3.5.1 Local Leadership and Pre-existing Social Capital***

Findings showed that local leadership played a critical role in the building of social capital either by leading the building process or by providing critical support to the process. The finding corroborates the previous study by Leach et al. (1999) who found the positive impact of investment in leadership development in social capital building in rural India. Likewise,

Anandajayasekeramet al. (2008) found a positive role for leadership in group cohesiveness. Murray (2006) also found a decisive role of leadership in improving and maintaining social capital at a high level. Utilizing local farmer leaders in mobilizing local farming communities for collective action has been an important extension strategy in Nepal (Shrestha 2008). Such leaders are found locally and hence are more knowledgeable about local agrarian and socio-cultural situations. However, such leaders seem to have been underutilized by the extension programs for building social capital in rural communities. At present, such leaders are more used for disseminating farm technologies without much regard to their potential use in mobilizing local communities and building social capital.

Findings also showed that pre-existing bonding and linking social capitals supported the social capital building process by expediting and lubricating the interaction between the actors. Similar findings were reported by Megyesi et al. (2010), who in their comparative study of dairy cooperative in Hungary and Austria found that pre-existing bonding social capital among the dairy farmers and their trust in the leadership played a decisive role in initiating the marketing cooperatives. With the advent of community based development in developing countries there has been an upsurge in organizing grassroots peoples' institutions (Shrestha 2008). Such pre-existing groups can serve as the foundation for the building of social capital. However, present community development approaches seem to lack effectiveness in capitalizing on such groups in building of social capital. Development agencies tend to form new groups instead of utilizing the pre-existing ones.

Similarly, pre-existing linking social capital of community leaders who access outside support can be an aid to further development of linking social capital with positive effect on bonding social capital. This can, however, be considered as 'dark side' of social capital as such leaders often tend to influence the service providing agencies for more resources at the expense of potential welfare of comparatively weak section of community. In sum, both the local leadership and pre-existing social capital can provide crucial support in social capital building process. Given the current state of utilization of both the factors by the prevailing extension system in Nepal there seems a lot of scope for making more effective use of these factors for the building of social capital.

#### ***6.3.5.2 Extension Agency and Agents***

Findings showed that the local extension agency and agents played a crucial role in building social capital. DADO helped in triggering of social capital and support to capitalize on the triggers to build social capital. The finding corroborates observation made by Swanson and Samy (2005) , who also underscored the importance of the extension system helping rural farmers build the social capital to get organized and to develop links with the markets. Similarly, in Nepal, extension staff from district headquarters based at DADO and local ASCs encourage farmers to be organized in groups and cooperatives in order to participate in extension teaching activities and receive various forms of partial funding. The extension agents provide information about possible funding and advise local farmers to combine in cooperatives. They also provide facilitation in the formation process of the cooperative and its registration. However, the finding did not reveal DADO officials and technicians aware of the social capital building in farming communities. So, it can be concluded that, despite their crucial role in social capital building, extension agency officers and technicians are less prepared for and utilized to foster social capital in the rural communities.

#### ***6.3.5.3 Similar Socio-economic Situation***

Findings demonstrated that the similar socio-economic condition of members also influenced social capital building positively. Most members in all the case study cooperatives were smallholder farmers. Farmers with similar socio-economic background generally have similar kinds of livelihood opportunities and constraints. The opposite is true with the situation when members are from dissimilar socio-economic backgrounds. Such similar socio-economic circumstances of the people may enhance the extent and quality of interaction among them and facilitate the building of social capital among them. Moreover, such similar socio-economic situations of member farmers might have also contributed to their regular attendance in the cooperative meeting and participation in other cooperative activities and affairs of the members. It can be argued that farmers will pay interest in joining networks of people and engage in interaction with them if they share similar socio-economic characteristics with common problems and needs. Therefore, it can be said that organization of farmers with similar socio-economic situations into cooperatives may help pursue common agendas and foster social capital building at the same time.

#### **6.3.54 Physical Factors**

Findings showed that physical factors also lent strength in the social capital building process. Physical factors such as proximity between members, and to service providing agencies, and accessibility of cooperative headquarters and production pockets can enhance the scope for frequent and meaningful communication and interaction thus contributing to building and reinforcing the social capital.

#### **6.3.6 Summary and Conclusion**

This section discussed the findings about various mechanisms of social capital building within the framework of agricultural cooperatives as well as various enabling factors of social capital building. It has shown that the monthly cooperative meeting is the main mechanism in small cooperatives with limited activities and membership suggesting this to be the main mechanism of social capital building in the rural agricultural cooperatives in the study area which often tend to small. On the other hand, for relatively large scale cooperatives selling farm produce by the members through the collection centre is the main mechanism of social capital building. However, with the growing trend of market-oriented vegetable farming greater use of collection centres can be expected to become the main mechanism of social capital building. Moreover, IPM FFS can be effective if cooperatives can run such FFSs regularly. The finding has also indicated that some informal mechanisms beyond the cooperative can also enhance the effectiveness of the mechanisms. This section also discussed various mechanisms of building of social capital work mainly through facilitating social interactions among the various stakeholders which result in creating and reinforcing different forms of social capital.

This section also discussed various enabling factors of social capital building. Such factors add to the effectiveness of the building process by enhancing the extent and quality of interaction between and among various actors. Findings have shown that farmer leadership and extension agencies are dominant factors. However, both the enabling factors seem to have been underutilized. The next section will present discussion on findings about the change in the social capital built through these mechanisms.



## **6.4 Research Question 3**

**What are the major manifestations of change in social capital built with the development of agricultural cooperatives??**

This research question sought to explore the changes in different forms of social capital along with the development of an agricultural cooperative. This section discusses the major findings on the changes that occurred in different forms of social capital.

### **6.4.1 Changes in Bonding Social Capital**

Major manifestations of change in bonding social capital were increased unity, creation, or reinforcing of, bonding ties, and development or increase in norms of reciprocity and trust.

#### ***6.4.1.1 Increased Unity***

Findings revealed a substantial change in group bonding social capital, which was expressed mainly in terms of perceived unity among the members. Other major unity related attributes exhibited within the cooperative were we feeling, shared sense of identity and belonging, and general absence of internal differences and conflict.

The finding may be partly attributed to the fact that members and the leadership shared the belief that they needed to stay united for the smooth functioning and the success of the cooperatives to help in ensuring the continuous flow of benefits from the cooperatives. It also appears that consciousness of leadership and the members about the potential downfall of cooperatives from internal division and other internal issues may also have contributed to remain united. Downfall of the cooperative could result in cessation of their privileged status. Similarly, participatory decision making and maintaining transparency by the cooperative management might have also contributed to the trust building, general absence of internal conflict, and members' general feeling of ownership of the cooperatives.

Moreover, building and strengthening of bonding social capital at an interpersonal level might also have contributed to change in the group bonding social capital because bonding relationship among members based on trust and norms of reciprocity could transform into group bonding social capital in repeated interactions. Role of the leadership, especially the chairmen, may also have contributed in cultivating and nurturing unity among the members

as they exhibited hardworking, cooperative, interactive, approachable, empathetic behaviours, encouraging the members to follow them and stay united. In a nutshell, increased unity among members as the main manifestation of change in bonding social capital might have resulted because of the shared belief of the members and leadership that they needed to stay united to receive continuous benefits from cooperative, as well as a positive role by leadership, mainly the chairman, in cultivating unity in the cooperative.

#### ***6.4.1.2 Existing Ties Reinforced and New Bonding Ties Created***

Another finding was that two types of network related changes occurred at individual level: creating new bonding ties, and reinforcing existing bonding ties, with the latter more prevalent. Generally, cooperatives are initially organized drawing membership from the farmers of same and adjacent villages who are known to each other and share much in common. When such farmers join a formal network such as a cooperative and start mingling with other fellow members they know more about each other; accordingly the extent of interaction between them increases.

On the other hand, this finding has suggested that new bonding ties are created in two circumstances. First, bonding ties are formed when the membership is expanded when the cooperative decides to increase scale and scope of the cooperative operation, and to accommodate more farmers from nearby villages of cooperative catchment. In this situation, new bonding ties are created between the new members who did not share the same neighbourhood before. Second, when the cooperative is formed in relatively new settlements or a village with a mixed population of newly arrived and established inhabitants, new ties are created by joining the cooperative. So, reinforcing network or bonding ties constituted the main manifestation of change in networks of cooperative members. Whether created by new ties or reinforced by existing ties, interpersonal relationships based on the norms of reciprocity, cooperation, and trust gradually develop among the members as their face-to-face interaction is increased (Putnam 2000).

#### ***6.4.1.3 Increased Norms of Reciprocity and Cooperation***

Findings revealed that the level of change or development of the norms of reciprocity and cooperation was influenced by the membership size, physical proximity between members and apparent economic deprivation. Comparatively higher growth in norms of reciprocity and cooperation were observed in cooperatives with small membership size with members living

in close proximity of each other. Both of these factors can be expected to facilitate frequent and more intensive interactions which are favorable conditions for building and strengthening social capital. Moreover, these factors make communication and exchange of information and labour easier compared to similar opportunities in relatively large cooperatives with scattered membership. Similarly, the objective of pursuing better livelihood opportunities as a result of economic deprivation can be expected to encourage network formation. The farm families pursuing better livelihood alternative may be motivated by the norms of reciprocity and cooperation as such families can benefit by, for example, labour exchange, and exchange of information and other productive inputs. Further, holding cooperative meetings regularly may also help reinforce the norms of reciprocity and cooperation among the members by facilitating frequent and regular communication and interaction. Hence, increased norms of reciprocity observed among the members might have mainly resulted because of two factors: small number of members in the cooperative who also lived in close proximity; and prompted by an urge of pursuing better livelihood options.

#### ***6.4.14 Development of Trusting Relationship, or Increase in Trust***

Likewise, findings showed a general development of trusting relationship, or increase in trust at least, among the cooperative members, and between the members, the cooperative management board, and employees. However, the trust was attributed more to financial matters. Members trusted fellow members and the cooperative management based on the latter's track record of not been involved in any financial irregularities or defaulting. This conditional or fractured trust can be attributed to a large extent to the increasing trend in Nepal of cooperative executives embezzling members' saving funds, mainly in saving and credit cooperatives, and fleeing<sup>17</sup>. Moreover, delivering good leadership had also contributed to the trust building. Honest, democratic, transparent and hardworking leadership continuously striving to better the cooperative can be expected to earn the trust of members, who may also follow the honest example set for them. In sum, such increased trust can be mainly attributed to good financial performance by the people in question together with the positive influence of appropriate leadership characteristics.

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<sup>17</sup>Such incidents were making frequent headlines and editorial coverage in popular daily newspapers(ekantipur.com 2014; Nagariknews.com 2014)

#### **6.4.2 Change in Bridging Social Capital**

Findings showed a relatively limited growth in bridging social capital both at institutional and individual levels mainly due to relatively poor development of cooperative sector as well as poor value chain orientation in agricultural production. Remarkable growth in the number of cooperatives in recent years has not been matched with the professional and institutional development of such cooperatives. There is general tendency of registering cooperatives to access instant government supports including subsidized chemical fertilizers (Shrestha 2010). However, many such cooperatives do not last long and eventually dissolve once they stop receiving supports. Similarly, higher level representative bodies such as District Cooperative Union and subject specific unions were found less active and capable. For example, in all the cases, such subject specific unions such as District Vegetable Growers' Cooperative Union and Agriculture Cooperative Union were quite new, so lacked experience in leading and supporting the grassroots primary cooperatives. Moreover, such representative cooperative bodies also generally lacked the funds to mobilize and assist their member cooperatives. On the other hand, poor commercial orientation in production as well as lack of scale economies, which has been the characteristic feature of most of rural agriculture, has resulted in poor integration of value chain actors in agricultural value chains, limiting the scope for building of bridging social capital among various chain actors.

Hence, relatively poor growth in bridging social capital has suggested a relatively weak role of mechanisms present within the cooperative in building of bridging social capital. Scholars have argued that a combination of bonding, bridging, and linking social capital is desirable for the sustainable livelihood of rural farmers (Narayan & Pritchett 1999; Woolcock & Narayan 2000; Kilpatrick 2007) . However, the finding of the study has suggested that rural agricultural cooperatives and their members have not been able to capitalize on the potential of building and utilization of bridging social capital for their wellbeing, arguably due to the early stage of development of commercial agriculture in the study area.

#### **6.4.3 Change in Linking Social Capital**

Findings showed that substantial change occurred in linking social capital at the institutional level although the level of change varied across the cases. Findings also showed that comparatively bigger cooperatives representing established production pockets with prior exposure of local farmers to support agencies were better positioned to build linking social

capital. The finding may be attributed to the fact that renowned production pockets are frequently visited by officials of service providing agencies, mainly DADO. Likewise, local farmers can also visit the office of such agencies seeking supports from them. Two of the four cooperatives were associated with established vegetable production pockets. Officials and technicians from the local DADO paid them frequent visits in the course of implementing and monitoring extension programs and activities. Such visits can be crucial in building linkage of local farmers as they provide opportunities for farmers to interact with the concerned personnel on aspects of farming and marketing related issues.

Pre-existing linking social capital of the main leadership also contributed to the positive change in this social capital. It appears that the cooperative leadership with a political background is more likely to build more linkages from local to central level government agencies and donors. The chairman of one of the cooperatives had a good stock of pre-existing linking social capital. He was found to have further developed this capital by utilizing the pre-existing one. Moreover, some personal qualities of leadership, such as active and hardworking nature, also appear to have contributed in such changes. All the four chairmen were found to be appreciated by most of the members for their active work approaching service providing agencies to access resources. This finding corroborates the finding of Bebbington (1997) who also found the crucial role of the leadership in building of linking social capital. However, his work did not explicitly mention the attributes of leadership.

Moreover, the finding showed that physical proximity of the cooperative to the service providing agencies influenced the linking social capital of the cooperatives and members. Physical proximity can be expected to help in exchange of visits and frequent interaction between cooperative leadership and staff of supporting agencies, resulting in building or reinforcing linking social capital. Also, in general, production pockets and the cooperative offices being located in accessible area also contributed to building linking social capital. Such accessibility may attract the officers of service providing agencies to visit the production areas which may result in increased interaction between them, the leaders, and members of the cooperative.

In general, findings also revealed a substantial change in linking social capital at individual level though it varied among the members of the same or different cooperatives. The finding may be attributed to a couple of factors. Firstly, linking social capital at individual level

might also have been influenced by the stock of this capital at institutional or the cooperative level. Therefore, the cooperatives with a good stock of linking social capital can provide more opportunities to the members to network with agency representatives, offering increased likelihood of building and expanding social capital. Secondly, individual variations may be attributed to acumen as well as activeness of such members. Active and astute members often tend to be quick in approaching the service providing agencies and to build relationships with the staff. In sum, substantial changes in institutional linking social capital had resulted from the prior exposure, belonging to established production pocket, dynamic and hardworking leadership, and easy accessibility of the location. All these factors arguably facilitate more frequent and intensive interaction between the cooperative management and the staff from service providing agencies, building and reinforcing of linking social capital. The change in individual linking social capital seems to be contingent on the level of change at institutional level of the cooperative as well as individual capacity to access this particular form of social capital.

In conclusion, findings showed a substantial change in bonding and linking social capital with only a limited change in bridging social capital. The finding has suggested that the change in bonding social capital was the core of social capital building process in the case study cooperatives as major changes were associated with the bonding social capital. The change in bridging and linking social capital was apparently powered to a large extent by the change in bonding social capital. This finding is in line with the finding of Woolcock (2001) who found a high level of bonding social capital manifested in local organizations. This was needed to expand networks to develop the bridging and linking social capital desirable to gain access to formal institutions that help increase economic development and enhance welfare of local people.

#### **6.4.4 Summary and Conclusion**

This section presented the discussion about the change in social capital of cooperative members derived from the development of the cooperatives. Increased unity among members as the manifestation of group bonding social capital is at the core of the social capital building process in rural agricultural cooperatives, suggesting that social capital building mechanisms in rural cooperatives are better suited for building and reinforcing of bonding social capital than other forms of social capital. The finding has also shown that increased unity in the cooperative may result from members' perceived understanding that benefits

from the cooperative is possible only from the unity among members; and positive role of the chairman. Good reputations in financial matters of members and the executives and trustworthy leadership characteristics may cultivate and enhance trust in the cooperative.

Likewise, norms of reciprocity increase when members live in close proximity, and when they have an urge to seek community assistance in fulfilling basic livelihood needs. Poor growth and development in bridging social capital can result from equally poor development of commercial agriculture. Positive changes in institutional linking social capital are more likely and more prominent when the cooperative represents an established production pocket with some prior exposure to service providing agencies; and when dynamic leadership is provided. In sum, increased unity among members as the manifestation of bonding social capital and the role of the leadership are critical factors of the social capital building process as these both critically influence access to the other two forms of social capital. A combination of all three forms of social capital is essential for better livelihood of rural farmers. However, the finding has suggested that potential for building and utilization of bridging social capital has not been fully exploited.

## **6.5 Research Question 4**

**What are the major utilizations and impacts on rural livelihoods of social capital built through the development of agricultural cooperatives?**

This research question aimed to explore various utilizations that members of cooperatives make of social capital. It also sought to explore various impacts brought about by the social capital in rural households and beyond.

### **6.5.1 Utilization of Social Capital**

Various scholars have argued that social capital helps in accessing other forms of capital, such as, human capital, financial capital, physical capital, and natural capital (Coleman 1988; Winters et al. 2001; Abenakyo et al. 2007). Findings of this study showed that accessing human and financial capital were the main utilizations of social capital by individual members. Likewise, at collective level the main utilization was in the form of collective bargaining and collective action.

#### ***6.5.1.1 Accessing to and Development of Human Capital***

The members mainly used social capital for the development of, and access to, human capital which ultimately improved their farm performance. Members developed their technical and management expertise in farm technology and information by virtue of bonding and linking social capital. As Coleman (1988) asserts the role of social capital in the development of human capital cannot be overemphasized. Swanson and Samy (2005) also posits that social capital facilitates collective action for mutual benefit through the organization and participation of farmers and rural people in a network of relationships. Hence, their opportunities of doing better in their farming profession are increased when they band together with fellow farmers and build social capital.

Members learnt about various farm technologies and information from fellow members within the cooperative. Hoanget al. (2006) reported a similar finding in a rice farming community in northern Vietnam, where local farmers utilized bonding social capital when accessing modern rice technologies. They, however, concluded that ethnicity, gender, socio-economic status, and power relations also influenced access to information and resources. Narayan & Pritchett (1999) also posit that information on innovations is likely to flow more quickly in communities and regions with better social capital. Sorensen (2000) also reported better transfer of farming technologies in the farmers' groups with a good stock of bonding social capital. This finding reinforces the importance of social capital for farmer-to-farmer technology transfer in rural farming communities in developing countries. Moreover, farmers in such communities tend to trust fellow local farmers more than the extension agents from outside or external expatriates.

Besides, the finding also suggests that such farmer-to-farmer technology transfer can be expected to be better and faster in the cooperatives with relatively few members owing to the scope of more intensive and frequent interactions among the members, leading to development of norms of reciprocity. Moreover, the level of utilization of bonding social capital to access farm technology and information could be higher in the cooperatives in which the level of skill, and knowledge endowment of bonding social capital, including that of the leadership of the cooperative, is relatively rich. In one of the case study cooperatives with relatively small size of membership and with farmers living in proximity of each other, members learnt various farm technologies from the chairman's expertise and from the experiences of fellow members. Moreover, members also acquired modern farming



technologies and related information when they participated in training and extension programs organized by extension agencies by virtue of linking social capital.

Similarly, bonding social capital was used in accessing human capital in terms of informal exchange of labour among members. This finding largely held true for the small cooperatives where members lived close to each other. The practice of informal exchange of labour has been a long lived tradition in rural farming communities. Villagers tend to offer free labour to fellow members in farming operation, especially during planting and harvesting. However, with the rapid change and transformation of rural socio-economic landscape this tradition has been on decline. But, bonding social capital built within the framework of rural agricultural cooperatives seems to have contributed to revitalizing this tradition at least to some extent. Hence, members improved their farming business by utilizing bonding and linking social capital. Such uses were more prevalent among the members of smaller cooperatives who also lived in close proximity.

#### ***6.5.1.2 Accessing Financial Capital***

Accessing financial capital in terms of farm credit was another major utilization of bonding social capital. Bonding social capital helped applicants' access to credit by providing guarantor support, recommending them for loans and helping fellow members meet the monthly saving quota or repayment instalments. This finding corroborates with other studies on the role of social capital in accessing micro-finance through group-based lending or rotating saving and credit schemes (e.g., Van Bastelaer 2000; Akram 2013). Thus, this finding has corroborated the significance of social capital in accessing financial capital widely discussed in the literature.

#### ***6.5.1.3 Collective Action and Collective Bargaining***

The study showed that bonding social capital at institutional level was practised for two main purposes, namely, collective bargaining and collective action. Ostrom (1994) also considered collective bargaining and collective action as two main advantages of social capital. Wambugu, Okello, & Nyikal (2010) also assert that, among other factors, the success of a rural producer organization and collective action in reducing transaction costs depend on social capital. Likewise, Serageldin & Grootert (2000) also argue that capacity to carry out collective action by the producer organizations depends on bonding social capital.

This study, however, suggests relatively poor utilization of this social capital for both collective bargaining and collective action. Relatively low level of employment of this social capital for collective action and collective bargaining in output marketing was found owing to small scale production and the general tendency of small scale farmers to sell produce individually. Likewise, poor utilization of social capital for managing farm inputs may be attributed to individual marketing and apparent inability to attain economies of scale by the purchasing members. This finding has hinted at a relatively poor role of rural cooperatives in managing farm inputs in the study area. Overall, the finding suggests the fairly limited commercialization of agriculture production and poor development of value chains in rural Nepal.

Findings also showed that collective bargaining was applicable more to accessing government support than produce and input marketing in rural agricultural cooperatives. The finding is attributable to the general tendency of rural producers to be inclined more towards government support than creating their own space in specialized production and participation in agriculture value chains. Moreover, findings showed bigger cooperatives with renowned production pockets, located in accessible places, and also blessed with the leadership's pre-existing linking social capital, enjoyed relatively high collective bargaining for more and better services with the service providing agencies. These desirable attributes tend to attract and influence the service providing agencies in developing countries. This finding may also be attributed to the 'dark side' of social capital (Bourdieu 1986) in terms of its role in reinforcing class and inequalities in the society.

In sum, despite the proven benefits of social capital for collective bargaining and collective action in reducing transaction costs in various aspects of agricultural production and marketing, their utilization was limited in the context of the case study area. Moreover, collective bargaining more for accessing extension and other government support indicated the relatively primary stage of development of agricultural cooperative and low level of agricultural commercialization in the study area. Also, the finding that bigger cooperatives with the privilege of leadership's greater stock of linking social capital were capable of accessing more supports from service providing agencies was an apparent manifestation of 'dark side' of social capital.

#### ***6.5.1.4 Garnering Community Support***

Findings showed that garnering physical and emotional support from fellow members were the main non-market type benefit of bonding social capital. Likewise, the practice of being provided with helping hands from fellow members in organizing social and cultural functions and other kinds of rituals was another benefit of bonding social capital. The role of bonding social capital in providing emotional and social support and crisis has also been reported by Putnam (2000) and Murphy (2002). Helping out neighbours in emergencies and in need has been a custom of traditional Nepalese society since time immemorial. With rapidly changing demographic and socio-economic landscapes in rural Nepal this practice has also been on decline in recent times (Paudel & Thapa 2001; Sharma 2006; Sharma 2008). However, bonding social capital built within the framework of rural agricultural cooperatives seems to be an aid to preserve and revitalize this tradition.

At the same time, this tradition can play a crucial role in reinforcing bonding social capital leading to ultimate social harmony and social cohesion in the rural community. The finding, however, suggests that such traditions of support and help can be more prevalent in relatively small cooperatives and small scale of operation with members living in physical proximity, rendering more opportunities of interaction, exchange of information and norms of reciprocity among the members. Thus, findings have suggested that garnering community support can be an important use of bonding social capital for the members of smaller cooperatives.

#### ***6.5.1.5 Utilization of Group Bonding Social Capital to Build Linking Social Capital***

Combination of all the three forms of social capital i.e. bonding, bridging, and linking is necessary for the economic prosperity of small farmers and for enhancing sustainability of rural livelihood in the developing world (Rydin & Holman 2004). Empirical evidence has shown that bonding social capital also helped in accessing bridging and linking social capital. Woolcock (2001) found mobilization of bonding social capital to expand networks, thus developing bridging and linking social capital to gain access to formal institutions such as banks, insurance agencies, the courts, enhanced welfare benefits, and economic development.

Group bonding social capital was found to have been utilized to build linking social capital mainly by the leadership in all the case study cooperatives. An increased ability to tap in to resources by virtue of linking social capital was found in these cooperatives. This finding

partly confirms the previous finding, indicating mobilization of bonding social capital builds bridging and linking social capital. Rankin & Russell (2010) found that bonding social capital was mobilized to develop bridging and linking social capital by mango farmer groups in the Mekong Delta, Vietnam seeking out alternative business opportunities and new customers for their fruit.

In conclusion, the finding has shown that rural agricultural cooperative members engage in using bonding social capital, both at group and individual level, more than the other two forms of social capital. Two major areas of utilization are accessing farm production and marketing supports and community support in need. Despite the potential use of social capital for collective benefits in terms of collective action and collective bargaining, social capital was not found used extensively.

Human capital development is perhaps the most important utilization in the context of farming communities. The study suggests that bonding social capital can greatly support farmer-to-farmer technology transfer in a rural community. The study also suggests the state of underutilization of social capital in the rural farming communities in terms of collective action in input and output marketing. This finding suggests there is not great development of agricultural cooperatives with a corresponding level of agriculture commercialization and value chain integration in rural Nepal. Likewise, collective bargaining is largely limited to accessing government initiatives and services, rather than negotiating for better terms of trade and favourable prices in input and output marketing.

### **6.5.2 Impact of Social Capital**

Findings showed that social capital contributed to various livelihood outcomes at individual member or household level and community level, as well in the performance of the cooperatives. Various scholars (Buckland 1998; Bebbington 1999; Narayan & Pritchett 1999; Uphoff & Wijayarathna 2000; Winters et al. 2001; e.g., Mubangizi 2003) have discussed the potential contributions of social capital for the improvement of rural livelihoods.

#### ***6.5.2.1 Impact at Individual or Household Level***

##### **i) Increased Household Income**

Findings showed that the main contribution of social capital was increase in farm income of the members. Social capital was found to have directly contributed to the farm family income

by helping farmers in accessing farm technology and information, credit, inputs, and market. Scholars have proposed social capital as a significant factor in promoting agricultural income (Wolz et al. 2005). They also found social capital to be a contributing factor in the material welfare of agricultural producers in Poland. Abenakyo et al (2007) also found positive impact of social capital in accessing livelihood assets. However, they found no significant effect of social capital on household income. So, the finding has largely agreed with the well-known potential role of social capital in increasing household income discussed in the literature.

## ***ii) Empowerment***

Findings also showed that social capital played a crucial role in the empowerment of men and women farmers, more so with the latter. Members had become better informed and confident after they joined the cooperatives. The finding corroborates the previous finding by Abenakyo et al. (2007) who found that social capital empowered more women to participate in decision making and enhanced the women's confidence. A similar finding was reported by David and Asamoah (2011). They found that participants of the IPM field school had built bonding and bridging social capital and, in the process, developed more confidence in public speaking as well as enhanced skills of social interaction.

The increased interaction among the member farmers, and between them and other parties can be crucial in farmers' empowerment. Through such interactions and the exchange of ideas and information farmers develop, or enhance, their capacity to make better decisions about managing their farm resources and performing farming and marketing operations. They may also learn new ideas and develop or change their worldview about particular subjects. In conclusion, finding has shown that social capital contributes to farm family income as well as in the empowerment of household head male and female farmers, and more so the latter.

### ***6.5.2.2 Impact at Community Level***

#### ***i) Transition to Commercial Agriculture***

Findings showed that social capital contributed in expanding and popularizing commercial vegetable farming, mainly through enhancing the members' access to technology, credit and the market. Moreover, social capital also helped in this trend by virtue of demonstration and spill over effects on members and non-member villagers. Vegetable farming had evolved as a main source of income for the majority of member farmers across the cases owing to its good

profit margin and a growing demand for vegetables. This finding is in line with the view of Sorensen (2000), who contends that, due to the ability of social capital to increase productivity and provide informal insurance, farmers' willingness to shift in production from food crops to cash crops has been on the rise in many developing countries.

Findings also showed that this trend had even attracted rural youths, otherwise going overseas for employment, to stay in the village and engage in vegetable farming along with some other villagers who would once waste time unproductively. The trend of rural farmers to engage in market-oriented vegetable production has been continuously increasing in Nepal in recent years (MoAC 2013; NPC 2013).

#### ii) Renewed Interest in Community Development

Findings also showed a renewed interest of rural populace in community development by virtue of social capital. Findings showed an increased participation of members and non-member villagers in community work. Member farmers were found to have made labour and cash contribution to complete community based small projects or schemes launched in the community because linking social capital gave access to financial support. Likewise, initiatives of cooperatives in preservation and maintenance of local resources such as local trails, sources of water, and forests were found in most of the cases. The finding is in line with the finding of Dahaland Adhikari (2008), who also found high level of cohesion of groups or bonding social capital behind the success of community based natural resource management in Philippines.

Participation of rural people in community work and other collective actions aimed at better management of natural resources has been a long tradition in Nepal. But, in recent years, with a fast changing socio-economic landscape including labour outmigration and urbanization, this practice has reduced drastically. Hence, the finding suggests a potential role of social capital in enhancing people's participation in community development endeavours.

#### iii) Community Cohesiveness

Psychological division in Nepalese society has been growing on various social, ethnic and regional grounds in recent years as the country continues to rally under political transition following the downfall of the erstwhile monarchy and it is trying to recover from decade-long armed conflict (Seddon & Hussein 2002; Sharma 2006; Gellner 2007). It is argued that social

capital can contribute in maintaining cohesiveness and social harmony in the community (Adler & Kwon 2002).

Good interpersonal relationships among the members were seen reflected in other community affairs beyond the cooperative. Such bonds among the members, within the cooperative were found to radiate even beyond the boundary of cooperatives. They also impacted on the relationships among villagers to build an overall community cohesiveness and harmony. Moreover, the study has shown a positive impact of bonding social capital in revitalizing an old Nepalese tradition of extending physical and emotional assistance to neighbours and other fellow villagers who are in need of support.

In sum, the finding has suggested the crucial role that social capital can play in socio-economic transformation of rural Nepal. It has contributed in areas of transition from subsistence agriculture to commercial farming. It has also helped boost community participation in the management of local resources and maintain cohesiveness and harmony in the community.

#### ***6.5.2.3 Impact of Social Capital in Improving Cooperative Functioning and Performance***

Findings showed that bonding with the support of linking social capital played a critical role in the smooth functioning and improved performance of the cooperatives. Valentinov (2003) contends that organizations such as agricultural cooperatives require a high quality of inter-agent relationship for their smooth operation. He adds such organizations are, therefore, social capital dependent organizations and can effectively function only when the required social capital is available. Sexton and Iskow (1988) identified organizational, financial and operational keys to success of agricultural cooperatives. Building on their work Hong and Sporleder (2007) asserted a critical role of social capital in ensuring these three keys to success. Challies (2010) also contends the crucial role of social capital in the success of the cooperatives.

Findings showed increased unity as the manifestation of group bonding social capital played a critical role in the successful performance of the case study cooperatives. Ruben and Heras (Ruben & Heras 2012) studied the role of social capital in the performance of Ethiopian Coffee Cooperatives and found that performance of the coffee cooperatives was positively influenced by internal cohesion, a strong manifestation of bonding social capital. In contrary,

he found that internal cohesion was compromised in cooperatives with heterogeneous composition and in which members tended to give more emphasis to building extra-community bridging social capital rather than on strengthening internal bonding ties. Dahal and Adhikari (2008) also found a high level of bonding social capital in natural resource management group, in terms of group cohesion and traditional norms, among an homogeneous community of indigenous people, as the reason for the successful natural resource management endeavours in Philippines.

#### i) Increased Commitment of Leadership and Members

The finding showed that the bonding social capital positively influenced the performance of case study cooperatives by bringing about increased commitment of the leadership and members towards the cooperative affairs. Such commitments were mainly demonstrated by devoting time and resources, paying attention to, and participating in, cooperative affairs, exhibiting trustworthy behaviour, and ensuring good governance by maintaining transparency and participatory approach in cooperative affairs.

The commitment of all the three major parties to cooperative affairs: members, leadership and employees in maintaining the good governance in the functioning can be expected to foster: improved communication among the three parties; easier and faster decision making; and promptness in implementation. All this will result in improved performance and success of the cooperative in terms of serving the members better and increasing the cooperative wealth and ultimately the socio-economic upliftment of members.

#### ii) Increased outside Support and Access to More Resources

Findings showed that the linking social capital also complemented the bonding social capital in improving cooperative performance. In general, the contribution of linking social capital to the success of the cooperatives was mainly achieved through providing extension and funding support, and capacity building mainly available from local DADOs. Moreover, findings showed that no significant influence of bridging social capital in the functioning and success of the rural agricultural cooperatives corresponding to the relatively poor building of social capital.

In summary, the finding has suggested while linking social capital also influenced the cooperative performance, the bonding social capital was critical for the functioning and



performance of the agricultural cooperatives. Commitment of the members and the leadership in cooperative affairs may have helped in better communication and interaction, and building of trust between the two parties, and promptness in decision making and implementation. These factors contributed to smooth functioning and improved performance of the cooperative. Successful or improved cooperative performance can better serve the members' needs and interests, which in turn can be expected to reinforce group bonding social capital. Moreover, such cooperatives can develop increased bargaining power to further access government support and resources by building and reinforcing linking social capital.

#### ***6.5.2.4 Critical Factors of Maintaining Bonding Social Capital for the Success of the Cooperatives***

Findings showed that unity, as the main manifestation of group bonding social capital, played a critical role in the performance of cooperatives. Findings suggest members and leadership alike strove to maintain this particular form of social capital because of their strategy of maximizing their own utilities because of the influence of social capital. Findings showed members' motivation for maintaining bonding social capital was influenced more by their objective of maximizing their own utilities whereas leadership's motivation seemed to have been influenced more by social capital as well as personality related factors. The finding corroborates the previous finding on rational behaviour of actors in their motivation for collective action (Ostrom & Ahn 2009). Ostrom and Ahn posit that motivation for collective action is the combination of a person's inherent nature of maximizing their own utilities as well as the influence of a social capital factor.

##### **i) Maximizing Own Utilities**

Findings showed continuously obtaining economic and social benefits by virtue of membership in the cooperative was the main motivation or driving force for the members to maintain group bonding social capital. This may be attributed to members' fear of losing that privileged status in case of potential collapse of the cooperative. This fear can motivate them to maintain loyalty and commitment towards the cooperative by taking interest in cooperative affairs and striving for the betterment of the cooperative. They also tend to maintain contact and communication with fellow members which may ultimately help in reinforcing individual as well as group bonding social capital. Likewise, it appears that when management serve better the members' needs and demands, and sustain the good governance in cooperatives affairs it also helps maintain group bonding social capital. This can be

expected to build trust between the members, the leadership, and cooperative management. This may also help reinforce the members' commitment to the cooperative. So, it appears that a wish of continuously receiving benefits and fear of losing them as well as better serving and transparent cooperative management motivated the members to maintain bonding social capital.

#### ii) Influence of Social Capital

Similarly, findings also showed a fear of social sanction motivated members to demonstrate network loyalty and commitment. The fear of potential retribution for non-compliance or violation of certain established group norms and rules may also have helped for them to stay away from such actions. Likewise, findings showed that the figures in the cooperative leadership, i.e. the chairman and the board members, were conscious of this too. The fear of potential negative social controls can be argued to urge the cooperative management to be fair and transparent which helps in the smooth functioning and successful performance of the cooperatives.

Moreover, findings also showed that a shared sense of identity and belonging apparently contributed to the willing obligation of leadership and members to the cooperative. Such shared values and beliefs can be expected to encourage the chairmen to strive for betterment of the cooperative, which in turn helps bind members together as a united group. Likewise, members can be expected to reinforce their dedication to the cooperative, leading to improved cooperative performance and success, and maintenance of group bonding social capital. However, findings showed only a fraction of members shared this feeling of shared identity and belonging indicating majority of members may not share the same. Thus, potential sanction and shared sense of identity and belonging apparently contributed to the maintenance of group bonding social capital.

#### iii) Personal Characteristics

Findings also showed that some inherent personal attributes of the chairman of the cooperative, such as interest in social work, self-esteem, and altruistic behaviours seemed to have contributed to group bonding social capital when the chairman demonstrate continuous commitment to achieving cooperative goals. Other scholars have also highlighted a decisive role of leaders and leadership in improving and maintaining a high level of social capital (Hurrelmann et al. 2006; Murray 2006). The finding is in partial conformation of the concept

of feedback loops between social cohesion and collective action (Diani 1997; Ruben & Heras 2012) in which social capital can lead to successful collective action which, in turn, may generate and reinforce internal social cohesion. Thus, the leader's strategies of fulfilling personal objectives as well their orientation of serving their community also contributed to maintaining bonding social capital.

### **6.5.3 Summary and Conclusion**

This section presented discussion on findings addressing research question four, which was about the utilization and impact of social capital built along with the development of the agricultural cooperatives. Findings suggest that out of the three forms of social capital, bonding social capital is utilized the most by the members to get various livelihood supports. This finding suggests that the rural cooperatives are better positioned for building of bonding social capital than the other two forms. Increased farm income and empowerment are two main impacts at individual member or household level. Likewise, at community level, social capital contributes to socio-economic transformation of communities by facilitating transition from subsistence to commercial agriculture and fostering better management of local natural resources and community cohesiveness.

Similarly, the group bonding social capital expressed variously within the cooperative by the members and executives crucially influence the functioning and performance of the cooperatives. The group bonding social capital, expressed in terms of increased commitment of members and cooperative leadership and management to cooperative affairs, and ensuring good governance in cooperatives, positively impacts the cooperative performance. The study also showed that motivations of cooperative leadership and the members for maintaining group bonding social capital is mainly the mix of influence of social capital as well as their strategy of maximizing their own utilities.

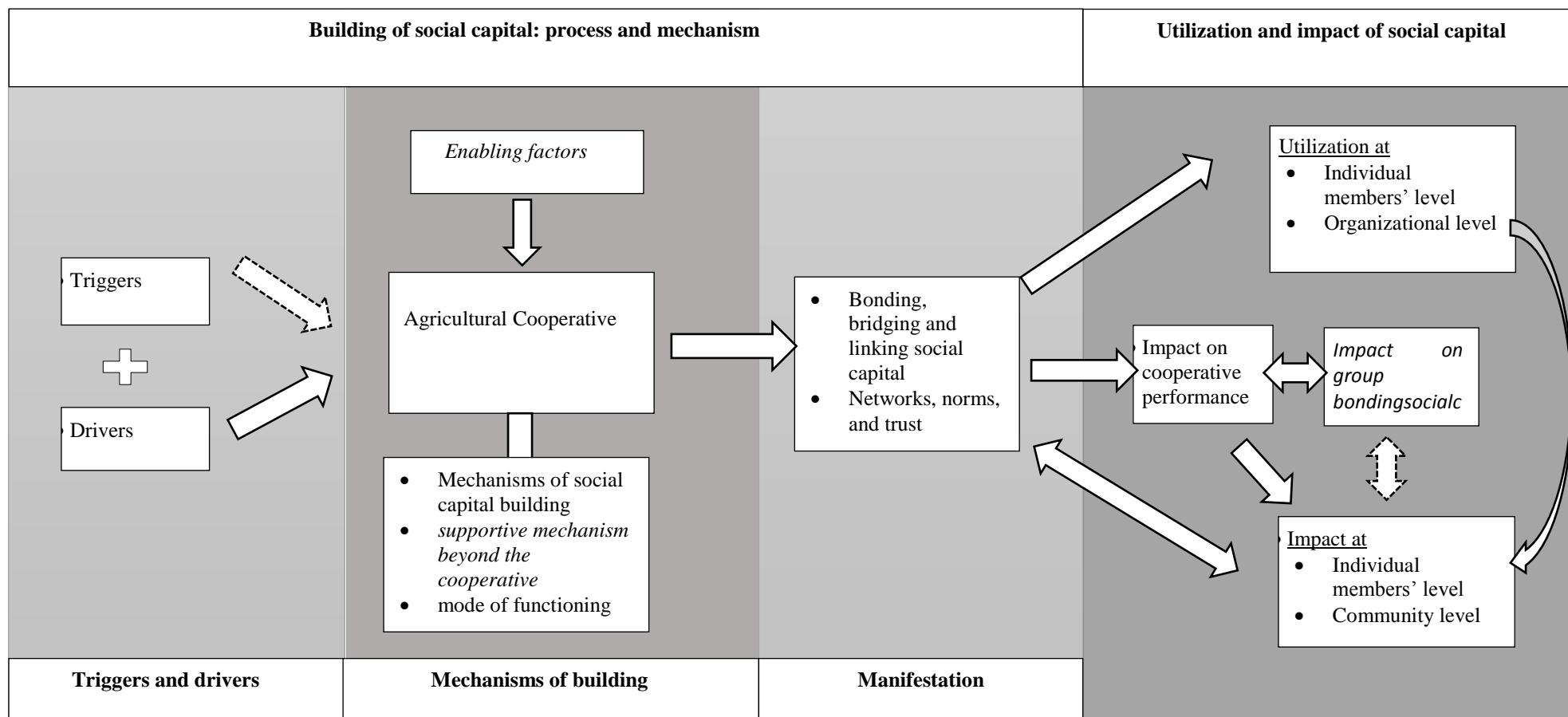
## **6.6 Revisiting the Conceptual Framework and Developing Model of Social Capital Building, and Utilization and Impact**

This section presents revised conceptual framework driven by findings and discussion and a model of social capital building within the framework of development of agricultural cooperatives, and utilization and impact of thus built social capital in rural livelihood.

### 6.6.1 Revisiting the Conceptual Framework

The findings and the discussion of the study warranted the some modifications or changes in the original framework. Supporting role of informal social interaction mechanisms beyond the cooperative in enhancing the effectiveness of mechanisms of social capital building present within the structure and function of cooperative was not initially envisaged. But, the finding has demonstrated that besides mechanisms housed within the cooperatives, there are certain informal forums and occasions which help in enhancing the effectiveness of mechanisms within the cooperative by facilitating reinforcement of network and the development of shared values and belief among the members. Similarly, the original framework did not mention enabling factors of social capital building. Finding has shown that largely local farmer leadership and extension agencies are the main enabling factors that support the building process by creating more a favourable environment for the social capital building to take place.

Further, the finding revealed that maintaining group bonding social capital, mainly in terms of sustained unity among members, plays a critical role in the functioning and performance of the cooperative which was also not included in the original framework. In addition, the finding revealed nature of relationships between the components which were not envisaged before. For example, the findings have shown that cooperative performance and group bonding social capital reinforce each other. Similarly, group bonding social capital and impact of social capital at individual members as well as community levels also influence each other. Moreover, finding also showed that impact of social capital and stock of bonding, bridging and linking social capital reinforce each other. The revised conceptual framework with the changes highlighted in italics is shown in Figure 6.1.



**Figure 6.1: Revised Conceptual Framework of Building of Social within the Framework of Development of Agricultural Cooperatives, and its Utilization and Impact in Rural Livelihood**

### **6.6.2 A Model of Building of Social Capital within the Framework of Cooperative Development, and its Utilization and Impact in Rural Livelihood**

Drawing upon findings of the study a model for social capital building with the development of agricultural cooperatives, and utilization and impact of social capital in rural livelihood is proposed here. This model can provide inputs to fostering social capital in rural communities contributing to eventual improvement of rural livelihood. The model presented in Figure 6.2 is developed based on cross-case findings and discussion as per the framework of conceptual framework presented in chapter two.

The model shows that development intervention in the local farming community and local stimuli, generated by critical natural incident or the local leader farmer's initiatives, can trigger social capital building by stimulating concerted action for the collective benefit which may lead to the formation of the agricultural cooperative. However, development intervention and supports play a critical role in social capital building either by prompting triggering of the process or supporting the trigger to further the process. Drivers of social capital building, on the other hand, play a direct role in getting local farmers organized in agricultural cooperatives. They serve as the rationale and motivation for the farmers to form and then join such cooperatives. Policy is the overriding driver, although some other factors such as poverty and livelihood, economic opportunity, collective bargaining and socio-cultural factors also act as the drivers of social capital. This study has shown that the government policy of providing extension services via farmer groups or cooperatives and supporting the agricultural cooperatives is the key factor associated with triggers and drivers of social capital building in rural farming communities.

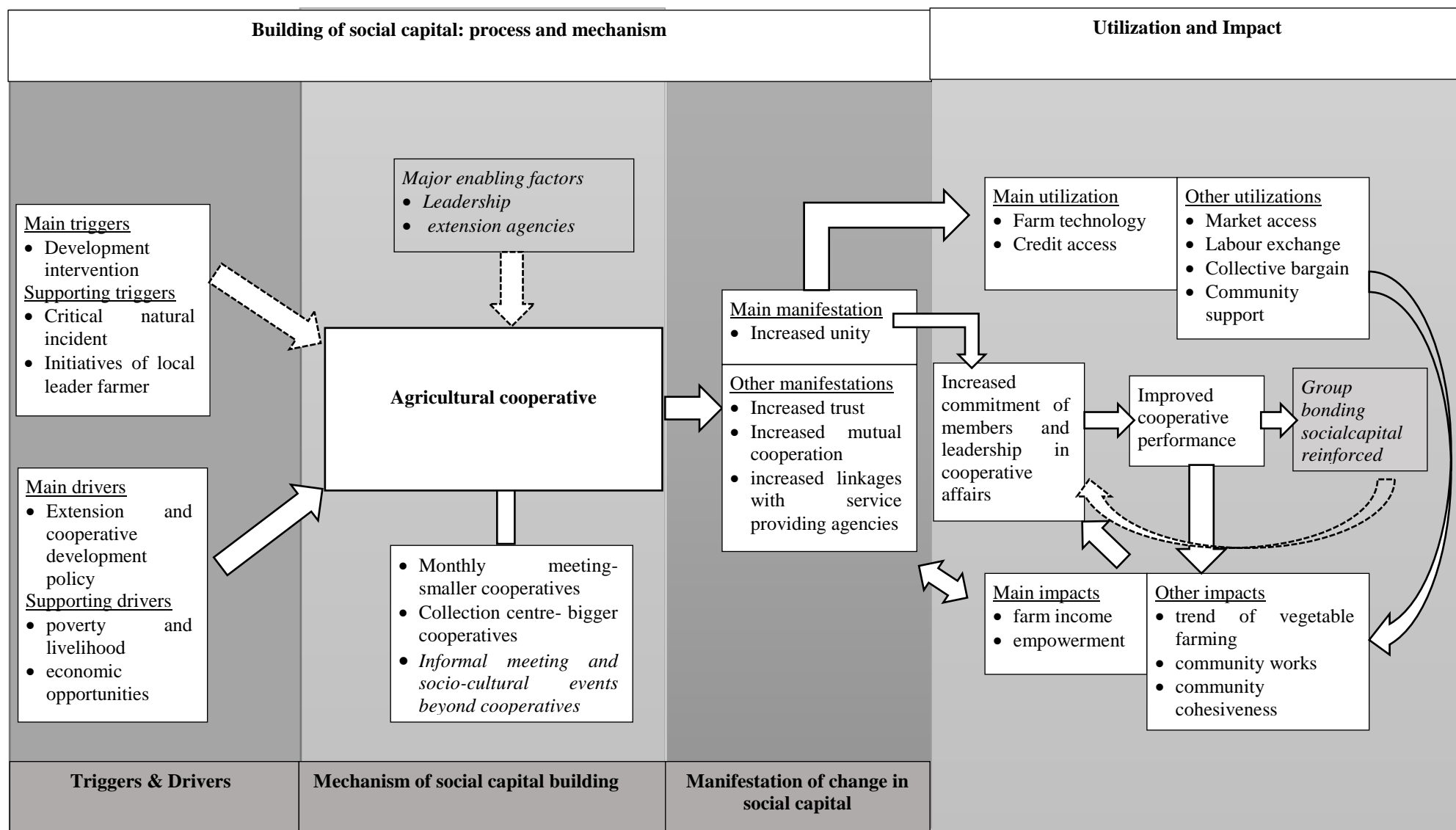
Among the various mechanisms of social capital building within the framework of the cooperative, participation of the members in monthly meeting is the main mechanism of social capital building in comparatively smaller cooperatives, whereas selling vegetables through a collection centre is the main mechanism in the case of bigger cooperatives that own such facilities. Moreover, some informal forums beyond the cooperative also help in enhancing effectiveness of mechanisms of social capital building within the cooperatives.

Positive change or development of group bonding social capital, manifested mainly in terms of unity among members, is the core of the social capital building process in the cooperatives as this form of social capital also influences other forms. Increased trust and mutual

cooperation are other changes in bonding social capital. The norms of reciprocity among members of the cooperative are generally higher in smaller cooperatives than the bigger ones. Likewise, trust in fellow members and the leadership was mainly attributed to financial transparency and absence of a past history of defaulting and fund embezzlement. Creation of new linkages with service providing agencies is the main change in linking social capital. Linking social capital is higher for the cooperatives having renowned production pockets; prior exposures of local farmers to external support agencies; and production pockets and situating the cooperative headquarters in a readily accessible place. Generally, the growth in bridging social capital is insignificant.

Various socio-economic factors, leadership, extension agency and agents, and physical factors provide a good support to the building process. Of the various such factors, local leadership is the most important one. Local leadership play a critical role in the social capital building process either by causing it to trigger or providing crucial supports in the process. Role of local extension agency i.e. DADO comes second as it too either triggers the social capital building process or supports it variously. Physical factors in terms of proximity and accessible location also lend good support in social capital building.

Bonding social capital is utilized more than the other two forms by the members. Accessing farm technologies and information and credit are two major utilizations of social capital at the individual level. Likewise, better market access is the main benefit for semi-commercial and commercial farmers from bigger cooperatives belonging to well established production pockets. Similarly, utilization, in terms of exchange of labour, is more prevalent among the members from small cooperatives who also live in close proximity. At the collective level, the main utilization of social capital is for collective bargaining for government services and facilities, with limited use for collective bargaining in produce marketing by the members from bigger scale cooperatives. Likewise, collective action is also applicable in a limited scale for such cooperatives and members in attaining economies of scale. Utilization for community works is more prevalent in smaller cooperatives. Utilization of social capital also contributes to creating various desirable impacts.



**Figure 6.2: A Model of Social Capital Building, Utilization and Impact in Rural Farming Communities within the Framework of Development of Agricultural Cooperative**



Social capital tends to help improve livelihood of cooperative members. The major impacts of social capital at member or household level are contribution to increased farm income and increased empowerment. Likewise, expanding and popularizing vegetable farming, and reinforcing of the trend of community participation in local resource management and community cohesiveness and harmony are major impacts at community level. Of the three forms, bonding social capital (mainly group bonding social capital) critically impacts the functioning and performance of the cooperatives the most by bringing an enhanced commitment of the cooperative leadership and general members towards the cooperative affairs. Improved cooperative performance directly influences producing various livelihood impacts. Such impacts reinforce the commitment of members and executives. On the other hand, improved cooperative performance and group bonding social capital reinforce each other. The reinforced group bonding social capital in terms of increased unity, in turn, reinforces commitment of members and executives. Moreover, an expectation of potential economic benefits, and personal interests and choices, together with attributes related to social capital, such as shared sense of identity, belonging, and fear of social sanction, are major motivations for maintaining the group bonding social capital for the cooperative leadership and the members.

### **6.6.3 Summary and Conclusion**

This section presented the revisited conceptual framework and a model developed based on the study findings. Findings prompted some changes or modifications in the original conceptual framework to include some new components and relationship between components. Based on the finding, a model of building, utilization and impact of social capital occurring within the framework of development of an agricultural cooperative was presented. The model portrays various possible triggers and drivers of social capital building which result in the formation of agricultural cooperatives. It also shows that the structure and function of a cooperative provides various mechanisms of social capital building which facilitates building of bonding, bridging and linking social capital. Social capital thus built is utilized by the individual members, as well as the wider community. It also produces various livelihood impacts at both the levels. Social capital, mainly bonding social capital, also impacts the functioning and performance of the cooperative which reinforces positive rural livelihood impacts as well as group bonding social capital. Reinforced bonding social capital,

in turn, helps in improved cooperative performance as well as livelihood impacts. Livelihood impacts, in turn, also reinforce the commitment of members and executives.

## **6.7 Chapter Summary and Conclusion**

This chapter presented the discussion of findings addressing the four research questions of the study. It also revisited the conceptual framework of the study and revised that based on findings. It also presented a model of social capital building within the framework of agricultural cooperative development, and utilization and impact of social capital in rural livelihood.

It showed that government policy of supporting farm sector and rural development plays a crucial role in forging the triggers and steering the process of social capital building by prompting the formation of rural agricultural cooperatives and local farmers joining them. It showed that among the various mechanisms present within the cooperative, a monthly cooperative meeting is the main mechanism in small scale cooperatives. Rural agricultural cooperatives often tend to be small in terms of membership size and number of activities and member oriented services. Monthly meetings, therefore, can serve as the main mechanism of social capital building in them. Likewise, for relatively large scale cooperatives with collection centre facilities, sale of farm produce by the members through the collection centre is the main mechanism of social capital building. With increasing trend of market-oriented vegetable production and establishing collection centres near the production pockets collection centre can be expected to become more important mechanism in future. Besides such mechanisms present within the cooperatives, there are some informal mechanisms beyond the cooperatives. Such informal mechanisms provide good support and complement the mechanisms within the cooperatives in building and reinforcing social capital by improving the quality of interaction among the members. This study has suggested that various mechanisms of social capital building work mainly through facilitating social interactions among the various stakeholders, with resultant building and reinforcing of different forms of social capital. Findings revealed various factors such as farmer leadership and extension agencies are dominant factors supporting the building process.

The findings have suggested that the change in bonding social capital is the core of social capital building process. Increased unity of cooperative members is the main manifestation of change in social capital with increased mutual cooperation and trust. Substantial change is in

linking social capital comprises linkages developed with service providing agencies whereas the change in bridging social capital tends to be insignificant. Therefore, the finding has suggested that social capital building mechanisms in rural cooperatives are better suited for building and strengthening bonding social capital than other forms of social capital. The finding has shown that the bonding social capital, both at group or collective level and individual level, is utilized by cooperative members more than other two forms of social capital. Two major areas of utilization are accessing farm production and marketing and community support. Despite the potential use of social capital for collective benefits in terms of collective action and collective bargaining, social capital seems to have been underutilized for collective action.

Findings have suggested that social capital can play a vital role in socio-economic transformation of rural Nepal by contributing to a transition from subsistence to commercial agriculture, as well as enhancing community participation in the management of local resources and maintaining cohesiveness and harmony in the community. The bonding social capital is critical for the functioning and performance of the agricultural cooperatives. Successful or improved cooperative performance may in turn help reinforce group bonding social capital. The study also showed that motivations of cooperative leadership and the members for maintaining group bonding social capital is predominantly the mix of the influence of social capital as well as rational decisions to maximize personal utilities. The next section will present the conclusion of the study.

## **CHAPTER 7      CONCLUSIONS AND IMPLICATIONS**

### **7.1 Introduction**

Small-scale farmers of rural Nepal have been confronted with a number of challenges, including rapidly changing internal agrarian and socio-economic environments, market liberalization and climate change, which are posing threats to the sustainability of their livelihood. In this context, the relevance of social capital has increased because of its observed capacity to enhance farmers' ability to cope with adverse situations by means of collective action. Moreover, this form of capital is also argued to be of more importance for the livelihood of poor and marginal people as such people can enhance their access to other livelihood assets and expand livelihood opportunities by drawing on this.

Development of rural agricultural cooperatives provides the framework and platform for the building of social capital in rural farming communities. Through case studies of four agricultural cooperatives operating in rural Nepal this research studied the building of social capital in such cooperatives by exploring triggers and drivers, mechanisms and manifestation of social capital. The research also explored the utilization of thus built social capital by the members of the cooperative, and explored the contribution of social capital in bringing various livelihood impacts at individual member or household and community levels as well as that in the functioning and performance of the cooperative itself.

The purpose of this chapter is to present the conclusion of the study based on research findings. The chapter starts with answer to research questions and presents a conclusion on the research problems. This is followed by the implications for theory, policy and practice, limitations of the study and finally implications for future research.

### **7.2 Answers to the Research Questions and Conclusions about the Research Problem**

This dissertation sought to answer four research questions. These have been answered in Chapter 6, but the questions and their concise answers are repeated here for reader convenience.

### 7.2.1 Answers to the Research Questions

**Research Question 1:** What are the triggers and drivers of social capital building and how they are manifested within the framework of development of rural agriculture cooperatives?

Triggers of social capital building may be external (development intervention) or internal (stimuli such as natural calamity, or local leader farmer initiatives) to the community.

Drivers which further the building process include poverty and livelihood, economic opportunity, policy, collective bargaining and socio-cultural factors, with policy the most important.

Policy that supports the formation of rural agricultural cooperatives is crucial to their survival and success.

**Research Question 2:** What are the various mechanisms of social capital building within the structure and function of cooperatives and what are the key enabling factors of the building of social capital?

In small cooperatives the monthly meeting is the main formal mechanism of social capital building, but in large cooperatives it is the selling of farm produce through the collection centre. In both situations, informal mechanisms associated with improved social interaction beyond the cooperatives complemented the mechanisms within the cooperatives. Farmer leadership and extension agency activities play enabling roles by enhancing the extent and quality of interaction between and among various actors.

**Research Question 3:** What are the major manifestations of change in social capital built with the development of agricultural cooperatives?

Bonding social capital is the core of the social capital building process. Increased unity among members and executives is the main manifestation of the changes in social capital that occur in the cooperative in its development process. Substantial changes in this form of social capital may also result in similar changes in linking social capital but only limited change in bridging social capital.

**Research Question 4:** What are the major utilizations and impacts on rural livelihoods of social capital built through the development of agricultural cooperatives?

Bonding social capital is the form most utilized by members. At individual or household level, its two main impacts are livelihood improvement and empowerment. Impact at community level includes socio-economic transformation through facilitating transition from subsistence to commercial agriculture, better management of local natural resources, and enhanced community cohesiveness.

Bonding social capital with the support of linking social capital critically helps improve cooperative performance. Improved cooperative performance prompts the members and the executives to maintain this form of capital through demonstrating network or group loyalty as well as enhanced commitment towards the cooperative affairs. Their motivations for maintaining bonding social capital is their strategy of maximizing their utilities as well as the influence of the bonding social capital itself.

### **7.2.2 Conclusions about the Research Problem**

The research problem that stimulated this dissertation was:

**How is social capital built with the development of agricultural cooperatives and how does it impact on rural livelihoods?**

The overriding conclusion of the study is that building and reinforcing of bonding social capital is the critical feature of social capital building in rural farming communities within the framework of development of agricultural cooperatives. Moreover, this is the most important of all three forms of social capital for supporting rural livelihoods in rural Nepal. Effective implementation of supportive extension policies and respected local farmer leadership are critical enabling factors.

Policies on extension service delivery and cooperative sector development strongly influence building of social capital in rural farming communities. Although not explicitly aimed at building social capital, they indirectly support it. These policies play a crucial role in supporting the triggers and serving as drivers of the process of social capital building by prompting the formation of rural agricultural cooperatives and encouraging local farmers to join them.

DOA plays a crucial role in fostering and supporting the building of social capital in rural Nepal. It acts as the bridge between policy and practice, as the main implementer of extension and farm sector related policies. It translates such policies into programs and activities which are implemented mainly through FG and cooperatives in farming communities, thereby contributing to social capital building.

However, DOA's present extension and funding support guidelines and programs do not explicitly mention or target social capital building. The findings of this study suggest the merit of its inclusion as one of the agendas or strategies to promote sustainability of rural livelihoods. Through proper understanding of the likely triggers of social capital building DOA can support the process through providing needed technical and logistic support. Explicitly accommodating components supportive of social capital building in the DOA's extension guidelines and programs would arguably improve their effectiveness. More directly and intentionally fostering the building of social capital would contribute to greater success in formation and operation of rural cooperatives.

Similarly, given the critical role of local leadership in social capital building and utilization that has emerged from this study, developing and supporting local leadership in farming communities could be a high leverage priority. Promoting leadership development through increased engagement of DOA and its district and field level units with the rural communities can be expected to positively impact in social capital building, successful cooperative development and ultimately improved sustainability of rural livelihoods, community cohesiveness and social harmony in rural Nepal.

### **7.3 Contribution to Knowledge**

This research has contributed to the body of knowledge in the areas of social capital literature and methodological aspects of researching social capital. It has developed a conceptual model of building of social capital within agricultural cooperatives and its utilization and impact in rural farming communities in a developing country context. The research has also made an original methodological contribution by using qualitative assessment of social capital in a context not used before.

### **7.3.1 Contribution to Social Capital Literature**

The model of social capital building within framework of the development of agricultural cooperatives, utilization and impact of thus built social capital in rural farming communities, as presented in Section 6.6.2 is the main contribution of this research to the body of social capital literature. The following components of the model are contributions to the social capital literature in general, and to the building of social capital in particular, in rural farming communities in the context of developing countries.

The model shows the following:

1. There are triggers and drivers of social capital building; possible triggers and drivers are identified.
2. Triggers and drivers lead to the building of social capital in the process of formation of rural agricultural cooperatives.
3. The major mechanisms of building of social capital, how the mechanisms work, the complementarities of mechanisms within, and the informal mechanisms beyond the cooperative.
4. The major enabling factors of social capital building and their potential roles.
5. The ways in which social capital is utilized by the members and the community at large in rural farming communities.
6. The major likely impacts of social capital on rural livelihoods at household and community levels.
7. The impact of social capital in cooperative functioning and performance and the mechanisms by which it works.
8. The relationship between maintaining bonding social capital and improved or successful cooperative performance.
9. Feedback loops between manifestation of social capital, and its utilization and impacts.

### **7.3.2 Contribution to Methodological Aspects of Researching Social Capital**

This research used a qualitative approach incorporating case study method to explore the building, utilization and impacts of social capital. This approach has enabled several contributions to research methodology. Literature review suggested that the majority of previous studies of social capital employed quantitative measurement using survey



instruments. Such surveys typically used membership in social or community organizations as the measurement of social capital (Krishna & Shrader 1999; Grootaert & van Bastelaer 2001). However, this may not truly represent the social capital stock of a person (Rankin & Russell 2010). Likewise, tools developed and used were for measuring social capital in the whole community or a particular setting. Moreover, the measurement tools and techniques developed and used were largely based on a developed country context. This research has made the following contributions in methodological aspects rarely if ever previously adopted.

1. It adopted a qualitative approach for exploring building of social capital in rural farming community, in accord with Hyyppä (Hyyppä 2010b) who also suggests that qualitative methods can be better to identify social capital dimensions that are difficult to operationalize into quantitative indicators.
2. It assessed the change in social capital from data gathered from in-depth face-to-face interviews of participants, triangulated against similarly in-depth focus group data, instead of using superficial quantitative measurement tools such as membership in social organization. Rather it used qualitative indicators based on thematic analysis to qualify or explain the changes.
3. It assessed the change in social capital comprehensively by considering change at three levels – individual, organization or cooperative and community level.

### **7.3.3 Contribution to Knowledge.**

This research was conducted within farming communities of the hills region of rural Nepal. As discussed in Chapter 1, the relevance of social capital in such communities has continued to increase owing to rapid change in demographic, socio-economic and natural environment in the hills. Fostering and supporting the building of social capital in such communities would help in livelihood improvement and sustainability of rural livelihood and environment.

This study has attempted to bridge the knowledge gap about the formation, support and importance of social capital in the context of rural Nepal. It has developed new knowledge about the following aspects:

1. Triggers and drivers of social capital building.
2. Mechanisms and enabling factors of social capital building.

3. Major manifestation of the change in social capital. A new term- group bonding social capital- has been given to represent bonding social capital at the group level which is mainly manifested in terms of unity or cohesiveness among members in a group.
4. Major utilizations and impacts of social capital in rural livelihoods.
5. Impact of social capital in cooperative functioning and performance.
6. Motivations and mechanisms for maintaining bonding social capital.

## **7.4 Implications for Theory**

This research presents the trajectory of the building of social capital in farming communities along the path of the development of rural agricultural cooperatives, and its impact on rural livelihoods in a developing country context. Thus, the research has implications for two major fields of theory: social capital theory and cooperatives theory. The research has contributed to social capital theory by developing a conceptual model of social capital building, utilization and impacts in rural farming communities. It has also contributed to cooperatives theory by demonstrating the role of the cooperative, its structure and function in building social capital.

Besides these immediate fields the research has wider implications. It contributes to development policy literature by demonstrating the role of policy in community organizing and building of social capital. It also contributes to the community development literature by highlighting the role of government in local community development of developing countries. Similarly, it also contributes to the literature by highlighting the potential role of leadership in mobilizing local people in community development endeavours. It also contributes to leadership theory by discussing traits and behaviours of grassroots farmer leadership with positive impact on social capital building and utilization.

## **7.5 Implications for policy**

One of the conclusions of this study is that government policies related to extension and cooperative sector play a crucial yet inadvertent role in social capital building in rural farming communities. An explicit strategy to support the building of social capital under the broad policy framework of extension and rural development is therefore warranted. This deliberate intention to foster social capital building as part of cooperative development could be expected to achieve better outcomes for government programs, in light of the finding that

social capital building underpins successful cooperative development and operation in rural communities.

The finding suggests the need of a paradigm shift in DADO extension approach and programming in order to highlight and enhance the role of social capital in rural and agricultural development to promote sustainable rural livelihoods. Accordingly, organizational leadership and staff need to be made more aware of the importance of social capital in rural communities, and their capacity to recognise, build and strengthen it needs to be promoted through specific training.

The findings suggest a crucial role for development intervention and funding support to community based schemes in triggering and nurturing the process of social capital building in rural farming communities. The implementation of need-based extension interventions and provision of funding to develop production and marketing infrastructure in rural areas are both powerful ways of achieving this.

The findings also suggest the potential of natural disaster events as powerful triggers for building of social capital. The implication here could be that as part of DADO response to such events, a formal policy of encouraging victims to become organized in a cooperative would not only allow efficient distribution of assistance but also provide longer-term benefits to the community through the positive impact on social capital building.

With the demonstration of the critical role of local leadership in successful cooperative operation and thereby building social capital, there is a strong argument for implementing strategic leadership development programs. Supporting the initiatives taken by local leaders to organize local farmers through capacity building and by providing various logistic supports will enhance social capital building processes while contributing to successful outcomes for FG and cooperatives. However, the increasing tendency of farmers to form and join agricultural cooperatives mainly to access free or subsidized inputs and other material support could be an issue both for the effectiveness of rural extension teaching programs and sustained development of social capital in rural farming communities. Extension policies need to be crafted with the goal of increasing independence and self-reliance of rural communities, rather than creating dependence.

An example of such an approach is in rural credit. Accessing credit is one of the main reasons farmers gave for joining a cooperative. A policy to expand the provision of interest free seed money from the commercial banks to such rural cooperatives to provide increased lending capacity to member farmers could help increase commercial activity and success of individual farmers while strengthening the cooperative through increased membership and also fostering social capital building. A similar argument exists for supporting rural agricultural cooperatives in ensuring timely and adequate supply of farm inputs and supplies to small farmers.

Construction of additional collection centres nearby the production pockets and providing other logistic support for the development of marketing cooperatives would also attract rural farmers to form and join such cooperatives and ultimately support the building of social capital. Likewise, provision of facilities like marketing yards and waiting rooms would provide conducive physical environment for meeting and interaction between farmers and other stakeholders. Further, given the fact that informal mechanisms complement the formal cooperative mechanisms, the identification and supporting of such informal mechanisms would help foster social capital building in rural farming communities.

With the present mechanisms providing greater support to bonding and linking social capital, there is scope and need to explore and support the mechanisms of building bridging social capital in rural farming communities. Building institutional capacity of rural agricultural cooperatives and representative bodies would help maximize the potential benefits of bridging social capital. Moreover, with the findings showing cooperatives smaller in terms of membership size and scale of operation are better positioned to build or reinforce bonding social capital, promoting cooperatives with small number of members would help foster the social capital in rural farming communities.

The study suggests that bonding social capital can greatly support farmer-to-farmer technology transfer in rural communities. Supporting the building of social capital in farming community and its utilization to support farmer-to-farmer technology transfer can help increase the current limited coverage of the public extension service in Nepal<sup>18</sup>.

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<sup>18</sup> Coverage of public extension service in Nepal is estimated to be about 15 % of the total farm families (MoAD 2014)

## **7.6 Implications for Practice**

### **7.6.1 Government and Non-government Support Agencies**

This study has clearly shown that extension and related development interventions have the capacity to trigger social capital building in rural farming communities. It is therefore imperative that DOA identifies the production pockets having potential to exploit economic opportunities such as market oriented vegetable farming while launching extension and cooperative development programs because as finding has also shown launching of such programs could trigger building of social capital. Likewise, identifying the promising cooperatives and directing resources to help them better serve the needs of the members and keep intact members' commitment towards the cooperative could be expected to lead to building and reinforcing social capital.

This study has shown that monthly meetings are the main formal mechanisms of most rural agricultural cooperatives. Hence, promotion of monthly meetings is critical to supporting cooperative success and helping foster social capital building. DADO can consider the regularity of monthly meeting as one of the main criteria for support. Provision of recognition and some logistic support to such cooperatives would help. Existence of an appropriate venue for the monthly meeting could be an issue for some small cooperatives lacking their own office building. Provision of assistance to establishing such a venue could be a focus for support agencies and donors.

Likewise, development agencies working with the local community can utilize the pre-existing community based groups while forming grassroots farmers' networks, including farmer groups and cooperatives. This would enhance the extent and quality of interaction among members with positive effects on social capital building. However, there is a danger that support may be provided inequitably, in that already successful cooperatives may continue to receive support, while others in greater need receive none. Some larger cooperatives with prior contact with extension agencies and located in easily accessible locations tend to build and further develop linking social capital, which then enhances their capacity to attract further support. This can be said to be the 'dark side' of social capital. Support agencies need to adopt a balanced approach by reaching out to poor and marginalized farmers of remote and less accessible areas instead of continuing to serve those more easily reached.

As findings have suggested, the unity within the cooperative as an indicator of good stock of group bonding social capital plays a critical role in cooperative performance and success by bringing the commitment of members and leadership to the affairs of the cooperative. Maintaining good governance is crucial to long term stability and success, and concerned stakeholders need to be sensitized to this issue. Governance training could be a core theme of leadership development programs. Likewise, factors that promote development and maintenance of group bonding social capital could also be addressed through such training.

### **7.6.2 Primary Cooperatives and Representative Bodies**

This study has shown a tendency of members sending the monthly saving quota of money with fellow members to deposit in the cooperative. This practice will not serve the objective of social capital building and needs to be discouraged through positive incentives such as by providing tea and snacks and other packages. Such incentives can encourage physical presence of the members on the meeting day with resulting positive impact on social capital building. Further, the existing practice of enforcing a fine for the absence in some cooperative activities or occasions may improve attendance of the members but not social capital.

Further, it is desirable to form a cooperative with membership drawn from the same village or from the people living in physical proximity, and also where possible from pre-existing traditional and self-help groups. This would have positive impacts on social capital building by expediting the process.

### **7.7 Limitations of the Study**

The study had the general limitations of qualitative social research as well as several specific to this study. The main limitation of qualitative study is associated with the question of trustworthiness discussed in Section 3.6 of Chapter 3. This section also presents various measures taken to minimize the general limitations of a qualitative case study.

The first limitation of the study was the potential for researcher subjectivity and bias. Having prior experiences of working with the research subjects and in the research sites the researcher may have brought some preoccupation and bias about the subjects and the meaning of their worldview. This might have influenced the findings and the conclusions of the study. Likewise, familiarity with some of the participants and the fact that the researcher

was a staff member of DOA, created some possibility that cooperative members and executives would be tempted to highlight only the positive sides of the cooperative functioning and social capital related aspects, for fear of potential curtailing of future DADO support. Also, some participants might not have expressed their feelings and experiences openly and clearly due to their lack of confidence in talking with an official from a service providing agency.

To minimize these limitations several measures were taken. Firstly, coding schemes for data analysis were scrutinized by supervisors. Secondly, assumptions made for the study were made clear in the design phase, as presented in Chapter 1 under assumptions of the study. Similarly, the researcher maintained a record of hunches during fieldwork and in data analysis phase. This record highlights the researcher's hunches during research process; research participants, context, meaning of data, and impressions on findings, Measures were also taken to minimize the participants' bias in their responses, by making clear the researcher's role as a doctoral researcher not as a staff member of DOA.

The study had a number of other limitations pertinent to research topic and research approach and methodology. This research explored social capital building in rural farming communities of Nepal alongside or within the process of the development of agricultural cooperative. It, therefore, did not represent overall social capital building endeavours that might have taken place in such communities as this study omitted from the scope of the study other potential trajectories of social capital building beyond the framework of such cooperatives.

The study also did not explore and enumerate the informal and traditional forms of social capital that existed in the community, and therefore did not assess the influence or impact of such social capital on social capital building processes within the framework of cooperative development. Moreover, this research explored the social capital building within the framework of cooperative development from the perspective of cooperative members and leadership. It did not explore the phenomenon from the perspective of non-member villagers and other stakeholders and did not reconcile the perspectives of different parties.

## **7.8 Further Research**

This research was based on case studies of agricultural cooperatives operating in rural areas. With the growing number of agricultural cooperatives in peri-urban areas of large cities the model developed through this study can be tested and validated. The model can also be tested in other types of cooperatives, notably saving and credit cooperatives, which form nearly half of the cooperatives operating in Nepal (MoCPA 2015). This research has identified three critical factors of social capital building in rural farming communities: policy; government institutions and local community or farmers' leadership. A quantitative study can be conducted to determine the relative importance of each of these factors in social capital building.

## **7.9 Concluding Remarks**

This research demonstrated that building of social capital in rural farming communities can help improve sustainable rural livelihoods, which are under tremendous pressure amid the challenges posed by the rapidly changing socio-economic and environmental conditions. Relevant extension and cooperative development policies, and development of local leadership are major areas to consider for fostering and supporting social capital building in such communities. DOA as the main implementer of the extension and farm sector policies has the capacity to feed the policy to align it as per the foregoing implications, and bridge the gap in policy and practice. It should also lead any efforts or initiatives aimed at fostering the social capital in rural Nepal.

However, utilizing the strength of cooperative organization for building of social capital in order to support rural livelihoods is seemingly an issue not adequately addressed. Social capital is yet to enter into the field of academic as well as policy spheres of the country. This research can contribute to the opening up of discussions and dialogue about the potential role and importance of this capital in Nepalese society and particularly in rural communities.



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**Appendix 1: Checklist of questions for the interview**

**Interview no.:**

**Name of the person:**

**Date:**

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**A.1 checklist of questions for the interview with members**

**1. Personal and household information**

- Age, Education, Family size, Farming experiences (years), Land holding size etc.

**2. Fresh vegetable production and marketing practices**

- Area under vegetable farming, Major vegetables grown
- Uses (%) (Self-consumption, Marketable surplus, Other uses)
- Selling practices (%) (To coop., To vendors, To wholesale market, Selling at the farm gate, Selling self in local retail market)

**3. Reasons for joining vegetable cooperatives**

**4. History of the association with the coop.**

**5. Present involvement in cooperative businesses (what, how, when)**

**6. Services and facilities being received by virtue of being a member of the coop(what, how, when)**

**7. What changes have occurred in your farming practices, marketing practices, farm income, social status, level of confidence etc. since you became the member?**

**8. How it became possible? (What did you and others do within the coop? Who did help you and how?)**



**9. How would you explain your relationship with other members and that with the coop. management?**

- **Level of interaction among member farmers and with the coop. management**  
(occasion, frequency per month and process)
- **Shared values, beliefs, understanding**
- **Trust, norms of reciprocity, norms of cooperation, norms of collective action**  
(why/how important, level (0 to 10 scale), general norms, issues with, sanctions/implications for violating the norms, factors influencing)

**10. How would you explain your relationship with the farmers beyond the coop. and that with coop. unions and federations?**

- How many networks and contacts do you have?
- How are contacts with other farmers and coop./coop. union established
- Level of trust with these contacts (0-10 scale)
- Norms of reciprocity
- Norms of cooperation
- Norms of collective action
- What benefits have you realized

**11. How would you explain your relationship with government and non-government service providers?**

- How many networks and contacts do you have?
- How are contacts with GO/NGO service providers established
- Level of trust with these contacts (0-10 scale)
- What benefits have you realized

**12. What are some major factors responsible for the present state of cooperative affairs (successful endeavors or failures thereof?)**

**13. Issues associated with the cooperative**

- **Power relations in the coop**
  - Who is the most influential person in coop.?
  - How decisions are made (who makes decisions?)

- How decisions are implemented? (level of participation of general members in coop. decisions)
- Who holds the authority to mobilize coop. resources?
- Level of trust toward the coop. leadership (0 to 10 scale)
- How benefits are distributed among the members?
- Who benefitted the most and how?
- **Conflicts and reasons for**
- **Exclusion of particular social or economic group in coop. affairs**

**14. Suggestions for the better functioning of the coop.**

## **A.2 Checklist of Questions for the Interview with Cooperative Executives**

### **1. Member categories**

- Smallholder/Medium scale/Large farmers
- Caste composition
- Geographical area covered (VDCs/wards)

### **2. Membership process**

- Eligibility
- Procedure
- Membership obligation (Fee etc.)

### **3. Major activities of the coop.**

- Assembling of members' produce and selling in the market
- Providing loan to the members
- Selling farm inputs to the members
- Training and HR development
- Others

### **4. Major services provided and scale of services**

- Marketing of members' farm produce
- Selling farm inputs to the members
- Saving and credit facilities
- Others

### **5. Financial status of cooperative**

- Assets and property
- Latest balance sheet
- Share value etc.

### **6. Communication with the members**

- Process and channels
- Occasions
- Modus operandi

**7. General relationship between members and executives**

**8. Benefit distribution mechanism**

**9. Conflicts and resolution**

- Major possible areas of conflict
- Method of handling and resolving conflict

**10. Discrimination between member and non-member in service provisioning**

**11. Cooperative's role in community mobilization community works**

**12. Relationship of cooperative with other stakeholders**

- Other cooperatives
- District Cooperative Unions and other representative bodies
- service providers- GO/NGOs

## **Appendix 2: Checklist of Questions for Focus Group**

Cooperative:

Date:

Number of participants:

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### **Common reasons of the farmers joining the cooperative**

#### **Bonding social capital**

##### **Relationship among members**

- Reasons/occasions for meeting/interaction with each other
- Level of trust and reasons for
- Norms of reciprocity
- Norms of collective action
- Norms of cooperation

##### **Relationship with the coop. management**

- Reasons/occasions for meeting/interaction with
- Level of trust and reasons for
- Quality of interaction
- Level of member participation in coop. affairs

##### **Collective action**

- General norms of collective action
- Types/occasions of collective action
- General propensity of members toward collective action
- Collective action related issues

##### **Mutual cooperation**

- General norms of cooperation

- Types/occasions of cooperation
- General propensity of cooperative behavior of members
- Cooperative behaviour related issues

#### **Services received from the coop.**

- Market access (selling vegetables to the coop. or coop collecting the vegetables from members and selling in the distant market etc.)
- Provisioning farm inputs
- Credit facilities
- Training/workshop/exposure visits etc.

#### **Bridging social capital**

- How are contacts with other farmers and coop./coop. union established
- How are these contacts utilized
- Level of trust with these contacts
- Norms of reciprocity
- Norms of cooperation
- Norms of collective action

#### **Linking social capital**

- How are contacts with GO/NGO service providers established
- How are these contacts utilized
- Level of trust with these contacts

#### **Power relations and conflict in the coop**

- Decision making process and members' participation in decision making
- Who influences the decision, resource mobilization and benefit sharing in the cooperative
- Utilization of coop. resources
- Benefit sharing mechanism
- Major sources of conflict within the coop.
- How are conflicts resolved
- Practice of exclusion/denying coop. services to any group

### **Appendix 3: Research Project Information Sheet**

#### **Research title**

Building Social Capital within the Framework of Agricultural Cooperatives Development in Rural Nepal

#### **Purposes**

This research seeks to explore the social capital development and utilization in smallholder agricultural cooperatives in the Western Hill of Nepal.

#### **Expected duration of participation**

The field study will be for four months (September - December 2012).

#### **Procedures of Involvement**

In the first phase of the fieldwork participants will be involved in interview, focus group and workshop. Likewise, in the second phase, participants are expected to contribute in follow-up interview and workshop.

#### **Foreseeable Risk**

The only foreseeable risk is the potential tension arising from different views and disagreement between and among the participants during the discussion in focus group and workshop.

#### **Method to Maintain Confidentiality, Privacy, and Security of the Data**

The name of the respondent will only be used at the data collection process (interview and workshop). All participants will be identified by a code in the stored data to ensure their confidentiality. In the report, participants will only be identified by their general description.

Once data collected, it will be stored in a locked filing cabinet in a locked room. The soft data (database built from the raw data) will be stored at a computer protected by password. All personal identity will be coded, and it will not be included in the soft data. Research

participant can withdraw his/her involvement in the research at any stage and have the data/information destroyed.

### **Statement**

Participation in this study, at all stages, is voluntary and participant may withdraw at any time without prejudice.

This study adheres to the Guidelines of the ethical review process of The University of Queensland. Whilst you are free to discuss your participation in this study with project staff (contactable on mobile 9741 – 102392), if you would like to speak to an officer of the University not involved in the study, you may contact the Ethics Officer on 3365 3924.

Should participant have any question concerning the project, please contact:

**Ram Krishna Shrestha,**

Mobile: 9741 102392

Email: [ram.shrestha@uqconnect.edu.au](mailto:ram.shrestha@uqconnect.edu.au)

### **Feedback**

Each studied cooperatives will receive one copy of the output from each workshop. This includes initial results of the first phase of field work and preliminary findings of the study.



## **Appendix 4: Informed Consent Form**

### **Name of Project**

Building Social Capital within the Framework of Agricultural Cooperatives Development in Rural Nepal

### **Investigator**

Ram Krishna Shrestha

I agree to be involved in the above research project as a respondent. I have read the relevant research information sheet and understand the nature of the research and my role in it.

I would/would not like my name acknowledged in the acknowledgements page of the reports.

.....

Signature of research subject

Date:

## **Appendix 5: Distribution of Research Participants across the Cases**

<b>Case study</b>	<b>Data collection technique</b>	<b>Participants</b>	<b>Number of participants</b>
Mirmire Multipurpose Cooperative Ltd.	Individual interviews	Member of the cooperative	14
		Board member	2
	Focus group	Member of the cooperative	1 (15 participants)
Jana Kalyan Agriculture Cooperative Ltd	Individual interviews	Member of the cooperative	12
		Board member	2
		Employee	1
	Focus group	Member of the cooperative	1 (12 participants)
Triyasi Agriculture Produce Marketing Management Cooperative Ltd.	Individual interviews	Member of the cooperative	15
		Board member	1
		Employee	1
	Focus group	Member of the cooperative	12
Khapaudi Agriculture Cooperative Ltd.	Individual interviews	Member of the cooperative	14
		Board member	2
		Employee	1
	Focus group	Member of the cooperative	12